

THE IMPACT OF URBAN GROUNDWATER UPON
SURFACE WATER QUALITY: BIRMINGHAM –
RIVER TAME STUDY, UK.

by

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APPENDIX 11: DETAILS OF RIVERBED

PIEZOMETER INSTALLATION

PROFILE DETAILS

Profile	Width (m)	Distance downstream from profile 5 , top of perry Park (m)	OS Grid Ref SP	
1	7.93	1770	674	9125
2	7.79	1570	654	9127
3	10	1240	634	9146
4	7.73	1390	636	9131
5	13	0	546	9197
6	8	2630	703	9196
7	7.8	6140	902	9017
8	11.8	4170	818	9123
9	12	4290	822	9111
10	10.5	3990	808	9139
11	10	490	593	9206
12	11.6	940	612	9165
13	8	1990	691	9138
14	8.7	2290	692	9172
15	9.4	3600	788	9173
16	7.8	5600	852	9010
17	10.3	6680	950	9011
18	16.2	7800	1054	8965
19		2950		

River Bed Piezometer Details

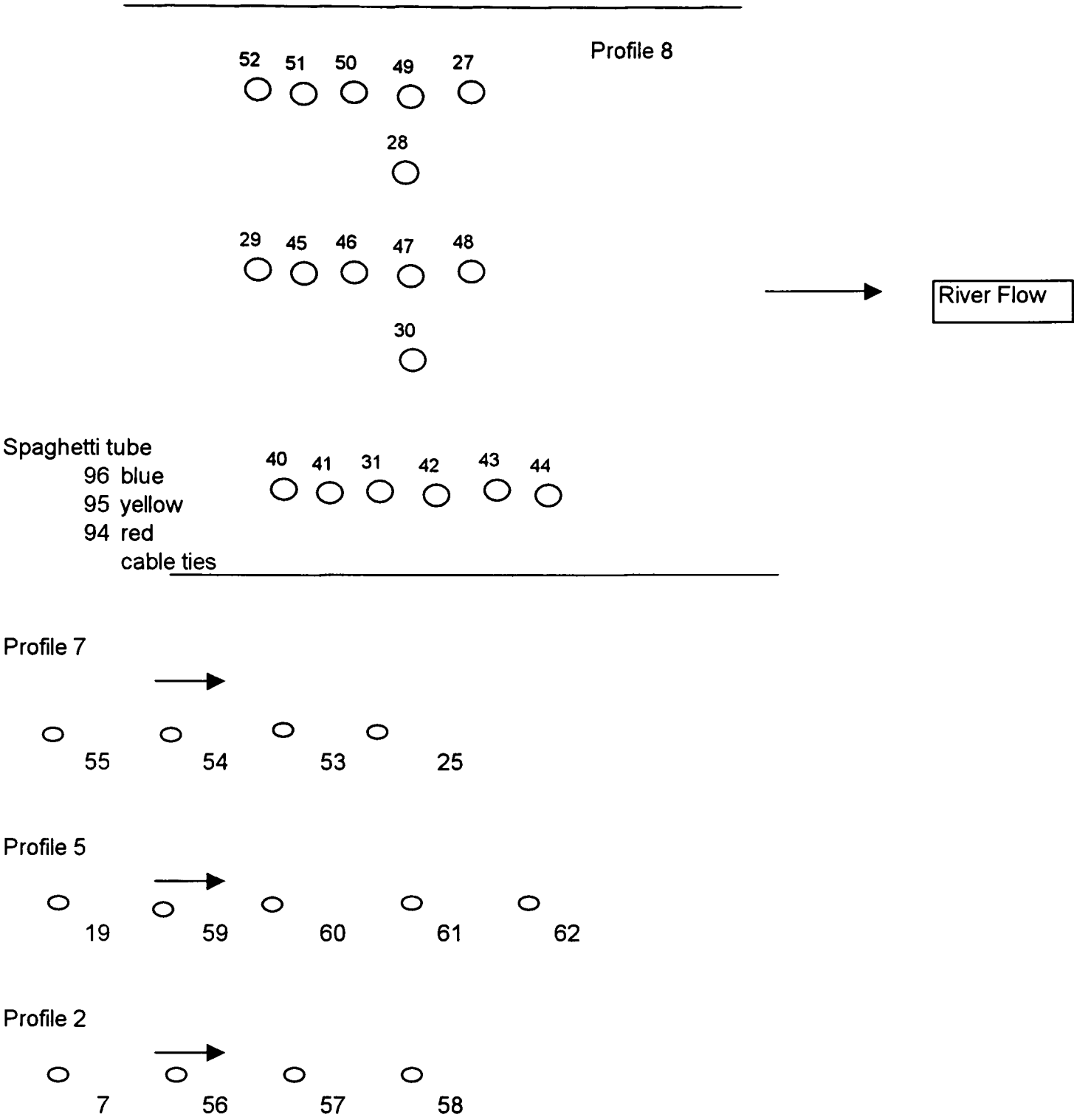
2000	River Bed Piezometer Details					
	Profile number	Piezometer Number	Distance from left bank looking downstream (m)	Depth of piezometer tip (m)	Level of piezometer tip	K (m/day)
2000	1	RB 1	1.3	0.25	93.45	0.60
	1	RB 2	1.7	0.41	93.28	
	1	RB 3	0.5	0.47	93.15	1.76
	1	RB 4	2.63	0.5	93.06	0.21
	1	RB 5	1.73	0.4	93.05	
	1	RB 6	2.17	0.28	93.49	1.15
	2	RB 10	6	0.65	93.85	0.67
	2	RB 56	1.7	0.7	93.73	
	2	RB 57	1.7	0.515	93.92	
	2	RB 58	1.7	0.34	94.09	
	2	RB 7	1.7	0.89	93.54	1.34
	2	RB 8	2.8	0.8	93.67	0.66
	2	RB 9	4	0.75	93.73	0.32
	3	RB 11	2	0.58	94.73	2.18
	3	RB 12	4	0.32	94.66	2.19
	3	RB 13	6	0.42	94.67	2.35
	4	RB 14	2.68	0.43	94.08	0.30
	4	RB 15	3.57	0.34	93.92	0.22
	4	RB 16	6.08	0.3	93.87	0.10
	5	RB 17	3.7	1.07	0.29	1.03
	5	RB 18	6.5	1.03	0.25	0.18
	5	RB 19	12.1	1.15	0.00	0.17
2000	5	RB 59	3.7	0.92	0.20	
	5	RB 60	3.7	0.71	0.42	1.52
	5	RB 61	3.7	0.51	0.63	14.27
	5	RB 62	3.7	0.27	0.84	1.40
	6	RB 20	1.6	1.17	0.01	7.84
	6	RB 21	4.1	1.04	0.00	3.49

Profile number	Piezometer Number	Distance from left bank looking downstream (m)	Depth of piezometer tip (m)	Level of piezometer tip	K (m/day)
6	RB 22	7.9	0.84	0.08	
7	RB 25	2	0.88	0.02	
7	RB 26	5.05	0.87	0.00	
7	RB 53	2	0.7	0.17	
7	RB 54	2	0.45	0.44	0.65
7	RB 55	2	0.25	0.59	0.25
8	RB 27	0.9	1.32	89.07	0.24
8	RB 28	3.4	1.24	89.03	
8	RB 29	6	1.22	89.03	2.34
8	RB 30	8.5	1.28	89.00	9.45
8	RB 31	10.9	1.255	89.01	
8	RB 40	11.1	0.95	89.31	6.95
8	RB 41	10.9	0.75	89.51	
8	RB 42	10.9	0.4	89.86	12.26
8	RB 43	10.9	0.335	89.93	
8	RB 44	10.9	0.21	90.03	6.44
8	RB 45	6	0.99	89.18	
8	RB 46	6	0.73	89.48	
8	RB 47	6	0.5	89.71	
8	RB 48	6	0.22	89.98	
8	RB 49	0.9	1.02	89.35	
8	RB 50	0.9	0.75	89.61	22.89
8	RB 51	0.9	0.48	89.88	8.37
8	RB 52	0.9	0.26	90.08	7.21
9	RB 32	0.9	0.995	88.69	2.15
9	RB 33	4.1	1.04	88.61	3.68
9	RB 34	7.3	1.08	88.52	0.76
9	RB35	10.3	1	88.54	4.13
10	RB 36	1.1	0.75	89.71	0.08
10	RB 37	3.6	1.06	89.42	0.37
10	RB 38	6.2	0.845	89.63	0.39
10	RB 39	8.3	0.93	89.51	0.36
	RB 23		0.98	0.00	4.91
	RB 24		0.27	0.00	

2001

Profile number	Piezometer Number	Distance from left bank looking downstream (m)	Depth of piezometer tip (m)	Level of piezometer tip	K (m/day)
11	RB63	1.1	0.8		
11	RB64	8	0.7		
11	RB65	6	0.44		
11	RB66	3	0.72		
12	RB67	0.6	0.63		
12	RB68	10.4	0.58		
12	RB69	7.4	0.61		
12	RB70	4	0.4		
13	RB71	0.8	0.5		
13	RB72	6.2	0.46		
13	RB73	5.4	0.56		
13	RB74	2.72	0.45		
14	RB75	1.7	0.56		
14	RB76	8.2	0.6		
14	RB77	6.5	0.49		
14	RB78	3.8	0.55		
19	RB79	1.92	0.41		
15	RB80	0.6	0.58		
15	RB81	7.75	0.5		
16	RB82	7.3	0.69		
16	RB83	5.2	0.62		
16	RB84	2.8	0.54		
16	RB85	0.6	0.51		
17	RB86	1.2	0.37		
17	RB87	3.8	0.32		
17	RB88	6.3	0.4		
17	RB89	8.5	0.44		
18	RB90	1.2	0.35		
18	RB91	4.9	0.55		
18	RB92	8.7	0.81		
18	RB93	13.5	0.55		
8	RB94	10.9	0.25		
8	RB95	10.9	0.15		
8	RB96	10.9	0.05		

Multilevel Piezometer Key



APPENDIX 19: CHEMICAL ANALYSES -

DETAILED METHODS

Anion Analyses

Samples were analysed using a Dionex DX-100 Ion Chromatograph (Environmental Health, University of Birmingham) with a conductivity detector. The principle of detection is that the anions in solution are passed through a capillary column. Each anion has a different affinity to the material within the column and will consequently pass at a different velocity through the column. Separation of the components thus occurs and detection is achieved by monitoring variations in the conductivity of the eluent stream.

Samples were injected via an automated system into the column with a degassed carrier eluent of sodium hydroxide. A stable pressure was applied to force the sample through the column within a 10 minute period. Separation of the anion sample components was achieved and a chromatograph produced based on a time versus conductivity plot. Peaks were initially identified using travel times with the computer software PEAKNET and subsequently manually adjusted if necessary. Peak area was related to concentration via comparison with a set of multi-component standards. Concentrations were then automatically calculated using the PEAKNET software.

A series of multi-component standards of fluoride, chloride, nitrate, sulphate and phosphate at concentrations of 0.01, 0.1, 0.5, 1, 5, and 10 parts per million were analysed at the start of each sample run. A 1 ppm standard was analysed as every 10th sample and any drift in the detector values during the sample run was compensated for using a linear correction based on time versus concentration. Blank deionised samples were run at the beginning and end of each run and subsequent to the initial run of standards to ensure there was no contamination.

The Dionex method and detector were configured for a maximum detection limit of 10 ppm, it was therefore necessary to dilute the samples by a factor of 40 prior to analyses. A lower detection limit was set at 0.5 ppm to account for this dilution factor and confidence in the method and detector.

Cation Analyses

Analyses was undertaken using a Phillips Pu74 50 with an inductively coupled plasma (ICP) generator, using argon gas and an atomic emission spectrometer (AES) (Department of Earth Sciences, University of Birmingham). The principle of operation is that the sample is passed through the high temperature argon plasma as an aerosol. The high temperature causes ionisation of the sample components and emission of characteristic spectra dependent on the atomic structure of each ion. Ions are identified by reference to a set of standard spectra and concentrations are proportional to the intensity of the emissions. The standard method of analyses was used (Harris, 2002).

Volatile Organic Compound (VOC) Analyses

A headspace sampling technique was used to extract the volatile components in gaseous phase from the headspace lying above the aqueous sample under high temperature conditions.

Samples are trapped on a hot sample loop prior to injection. The loop is back-flushed with helium to desorb the trapped sample components in a capillary gas chromatography column interfaced to a mass spectrometer. Component separation occurs within the column and compound identification is undertaken, based on travel times and comparison with standard spectra. Reference spectra and retention times for analytes are obtained by measuring calibration standards under the same conditions used for the samples. The samples were analysed at the Environment Agency Laboratory in Leeds using the standard method HSGC2 (Fardon, 2002).

Analyses for chlorinated solvents

The chlorinated solvents trichloromethane (TCM), trichloroethane (TCA), trichloroethene (TCE), tetrachloroethene (PCE) and tetrachloromethane (CTC) were also analysed (for a different set of samples to the VOC analyses) using the following method.

A liquid/liquid extraction was used to remove the chlorinated solvents by mixing the sample with pentane into which the organic compounds preferentially dissolve. A combination of 1 ml of air and 6 ml of pentane, spiked with an internal standard, is injected into the sample through the septum. A vent needle through the septum is used to allow excess water to escape. Care is taken that none of the injected pentane escapes. This is done by injecting above the base of the vent needle. The immiscible pentane collects at the top of the sample and a one microlitre volume of the pentane is removed and injected into the gas chromatograph capillary column flushed with a helium carrier gas. Component separation occurs within the column and compound identification is undertaken based on travel times and comparison with known standards.

Separated compounds eluting from the column with time are detected via an electron capture detector (ECD). The ECD is sensitive to the presence of halogenated organic compounds and allows lower detection limits ($1\mu\text{g/l}$) than the standard GC-MS. The ECD generates a stream of electrons from a nickel isotope source. The electron beam is attenuated by the presence of chlorine atoms and the resulting drop in current is registered as a peak on the chromatograph.

Concentrations for analytes are obtained by comparison of peak areas with multicomponent calibration standards, at between 1 and 50 $\mu\text{g/l}$ concentrations, analysed at the beginning of the sample run under the same conditions used for the samples. The pentane extraction solvent contains an internal standard of 1-bromo-2-chloroethane (BCE). All peak areas are normalised for each run by dividing by the peak area of BCE. This increases confidence in comparing results between runs by reducing errors resulting from detector variations between runs. Linear calibrations are derived by plotting normalised peak area versus concentration of the standards, and using the Excel regression fitting function to obtain the line formula. The formula is then applied to calculate sample concentrations from normalised peak area. Blank samples of deionised water were run periodically during each session of analyses to assess levels of background contamination and define the lower detection limits. A calibration standard is run at the end of the sample session to check for drift in the detector. The method accuracy calculated by previous workers (Hogan, 1999) was $\pm 6\%$ and more recently multiple injections of a PCE standard displayed a standard deviation of 9% (Shepherd, 2002). A lower detection limit of 1 $\mu\text{g/l}$ for the chlorinated solvents is considered to be realistic.

The samples were analysed by the author in the Earth Sciences Laboratory at Birmingham University using a method developed by previous workers (Hogan,1999, Taylor 1998, and Rivett 1989).

Gas Chromatograph Equipment and Set-up

The equipment used comprised an Analytical Instruments Model 92 gas chromatograph with a Trivector control and peak integration unit.

On-column injection was performed into a capillary column 30m in length, ID 0.53mm comprising silica with a BPX5 non-polar 1 micron polydimethylsiloxane internal coating. The column was baked for one hour at 115°C prior to use. After extended periods without use the column was flushed with gas for 24 hours before use.

A helium carrier gas was used at a capillary pressure of 2.2 psi

Detector Gases: nitrogen purge gas 25 ml/min⁻¹, nitrogen make up gas 25 ml/min⁻¹ (flow rates set manually using the stop watch function on the Trivector). After extended periods without use the detector was flushed with gas at high temperature to improve response. During periods of analyses a steady flush of gas was maintained overnight to prevent oxidation of the detector.

Programme parameters: maximum column temperature 250°C, maximum detector temperature 320 °C, injector temperature set at 0°C. Initial column temperature 42 °C with a

single ramp of 8°C per minute to a final temperature of 85°C. An initial and final isothermal period of 2.5 minutes each gave a total run time of 10.4 minutes. The control unit could hold a maximum of 43 analyses in memory. Amplifier B was used on a constant setting with an attenuation of 1.

Method parameters for data collection were set to include the total run time of 10.4 minutes with a start time of 0.5 minutes.

The order of peak arrival was TCM followed by TCA, CTC, TCE, BCE and PCE.

Preparation of internal standard and pentane extraction solvent

A mass of 16.64g of methanol (20.90 ml) was weighed into a 25 ml glass vial with teflon septa, to which was added 120 ul of BCE. The standard was then stored in the freezer for a maximum of six months before discarding. BCE was chosen as the internal standard owing to its lack of use by general industry and therefore it was unlikely to be present in the sample. The pentane extraction solvent was prepared at the beginning of each day by adding 66ul of BCE methanol standard to 62.6g (100 ml) of pentane within a 125 ml amber bottle with teflon septa. The pentane was kept in the freezer between extractions.

Liquid/Liquid Extraction

A volume of 6 ml of the prepared pentane and 1 ml of air were injected through the septa into the 125 ml sample bottle. The septa had been previously pierced by a detached syringe needle which was left in place to allow the escape of the excess volume as the sample contained no head space. The pentane was injected at a higher level than the vent needle within the sample

to prevent any loss of the pentane extractor. Both needles were then withdrawn and the sample shaken continuously for two minutes. One microlitre of the pentane was then extracted (using a methanol buffer in the syringe) and injected on column into the GC. The ratio of pentane to water is 1:20 which concentrates the sample and allows significantly lower detection limits.

Preparation of calibration standards

A high concentration multicomponent standard (A) was prepared from undiluted stock solutions of TCM, TCA, TCE, CTC and PCE. A mass of 15.9100g of methanol was placed in a 25 ml glass vial with teflon septa. Into this solution was injected the stock standard. All septa were replaced after the injection. The PCE standard was injected last, as it was most likely to remain in trace amounts within the syringe. A 5 µl buffer of methanol was used in the syringe to ensure that the entire volume of standard was expelled from the syringe. Standard A was then used to prepare the lower concentration standard B by injecting 513 µl of Standard A into 15.92g of methanol. The calibration standards for each day's analyses were created by injecting Standard B into 125 ml amber bottles of deionised water according to the volumes in Table A5.3.1.4-1.

Precautions against contamination.

A separate selection of syringes was used in the production of each set of standards to reduce cross contamination. After use each syringe was cleaned by flushing with methanol 15 times in turn from each of four test tubes. Glassware was thoroughly rinsed in deionised water and then heated in an oven for at least 24 hours to remove any volatile compounds. Blanks were run periodically throughout the sample run to check for contamination.

Fraction of Organic Carbon (F_{OC}) Analyses

A total of 16 samples were selected from the riverbed core material. The samples were reduced by a cone-and-quartering technique to provide a 500g sample of the sediment which was then crushed using a fly press. The crushed material was then run through a Teema Mill before a 10g aliquot was removed and dispatched for external analyses. The analyses was performed using a LECO CS225 Carbon/Sulphur analyser according to the method of Heron et al (1997) in which inorganic carbon is removed using sulphuric acid. Calibration was achieved with a single standard and the detection limit was 0.02%. The external laboratory that performed the analyses was T.E.S. Bretby of Burton-on-Trent.

Analyses for Vinyl Chloride

A total of 37 samples was selected from areas where groundwater was known to contain TCE, TCA and PCE. The samples were analysed by the Groundwater Protection and Remediation Group's laboratory at Sheffield University. The method employed was developed by Dewsbury, (2002).

A Combi-PAL autosampler (CTC analytics) with SPME adapter and fibre holder was used for the analysis of samples in this study. The sample was extracted for ten minutes and then thermally desorbed into a Varian 1079 injector held at 280°C in the splitless mode initially, then opened to a 100:1 ratio after three minutes.

The fibre was 75u carboxen/PDMS (supelco). A 0.75mm i.d. liner (Varian Inc.) was used. Separation was achieved on a CP Select 624 column (Chrompack) in a Varian 3800 gas

chromatograph. The initial column temperature was 40°C, which was held for three minutes and then heated at 25°C/min to 250°C (to keep column clean) A constant flow (1ml/min) of helium was used as carrier gas.

A Varian Saturn 2000 ion trap mass spectrometer utilising Saturn workstation 5.55 software was used for analyte detection and integration. Temperature settings on the transfer line (170°C), manifold (80°C) and the ion trap (150°C) remained constant throughout the analysis.

The mass spectrometer was tuned to optimise for vinyl chloride detection. The programme was set up to run from 3 to 5 minutes over a mass range of m/z 40-70 at 0.57seconds/scan (10 u Scans). VC was identified according to its retention time and mass spectrum, which was qualified by the (most intense) base peak ion as obtained from the analysis of a pure standard. The quantification ions and retention times used for analyte detection were: m/z 62, 4.0 min

APPENDIX 20 :SAMPLE DATA

Units Det Limit Sample No.	Type	Location	Profile	Distance down- stream m	Screen Depth m	Date Sampled	Time	pH	D.O. mg/l	Temperature °C	Conductivity µS/cm	Eh mV	Alkalinity as CaCO ₃ mg/l	F mg/l 0.1	Cl mg/l 0.1	NO ₃ mg/l 0.1	SO ₄ mg/l 0.1	PO ₄ mg/l 0.1	SI calcite	ppCO ₂
1870	SW		5	0		28/02/2001	09:30	7.45		8	658		327	0.9	212.4	32.3	145.5	0.3	0.289	1.94
1871	SW			240		28/02/2001	10:00	7.49		6.4	664		326	0.8	223.9	35.5	153.1	0.9	0.333	1.98
1872	SW			700		28/02/2001	10:30	7.47		6	644		330	0.7	207.8	31.7	141.5	0.0	0.054	1.96
1873	SW			950		28/02/2001	10:45	7.47		6	666		328	0.8	217.9	34.4	148.8	0.3	0.269	1.96
1874	SW			1200		28/02/2001	11:30	7.46		6.6	670		327	0.6	213.4	32.9	151.6	2.2		1.95
1875	SW			1420		28/02/2001	11:40	7.5		6.4	671		338	1.3	213.8	33.8	161.7	0.4	0.376	1.98
1876	SW		1	1770		28/02/2001	12:00	7.51		6.6	671		334	1.5	206.0	33.0	157.0	1.4		1.99
1877	SW			2000		28/02/2001	12:54	7.54		6.8	668		336	2.2	204.9	32.3	152.9	0.1	0.396	2.02
1878	SW			2140		28/02/2001	13:15	7.44		6.6	675		338	2.8	207.0	32.3	156.4	0.6	0.309	1.92
1879	SW			2380		28/02/2001	13:32	7.53		6.5	662		340	0.7	203.5	32.2	155.8	0.6	0.399	2.00
1880	SW			2600		28/02/2001	13:42	7.54		6.7	666		333	1.2	201.2	31.1	156.4	0.2	0.398	2.02
1881	SW			2830		28/02/2001	13:56	7.49		6.9	665		174	0.7	206.9	32.1	158.0	0.2	0.090	2.26
1882	SW			3050		28/02/2001	14:26	7.57		6.1	655		342	0.7	199.0	31.7	152.9	1.3	0.058	2.04
1883	SW			3300		28/02/2001	14:32	7.53		6.5	654		326	0.7	201.8	30.7	154.1	0.1	0.416	2.02
1884	SW			3630		28/02/2001	14:55	7.56		6.7	654		198	0.6	195.3	30.1	152.9	0.5	0.034	2.27
1885	SW			4220		28/02/2001	15:07	7.51		6.6	647		341	0.8	195.2	31.3	153.2	0.6	0.413	1.98
1886	SW			4760		28/02/2001	15:20	7.51		6.4	646		344	0.7	197.5	31.4	155.3	0.2	0.410	1.98
1887	SW			5200		28/02/2001	15:34	7.37		6.4	646		338	0.7	203.4	33.0	159.5	0.3	0.256	1.85
1888	SW			5760		28/02/2001	15:49	7.58		6.3	643		338	0.6	196.0	32.3	153.7	0.5	0.484	2.06
1889	SW			6700		28/02/2001	16:12	7.57		6.4	636		343	0.7	192.4	32.1	146.7	0.1	0.454	2.04
1890	SW			7290		28/02/2001	16:47	7.55		6.3	635		192	0.7	201.1	33.0	154.9	0.4	-0.258	2.27
1891	SW			7650		28/02/2001	16:59	7.59		6.3	633		330	0.0		0.0	0.5	0.0	0.466	2.08
1892	SW			7930		28/02/2001	17:14	7.58		6.4	637		322	0.6	190.8	31.6	149.9	0.0	0.446	2.08
1893	SW			8220		28/02/2001	17:27	7.63		6.4	633		335	0.1		0.8	4.1	0.0	0.523	2.11
1933	SW		1	1770		22/05/2001								1.7	108.0	40.4	172.1	6.0		
1934	SW		8	4170		22/05/2001								1.5	103.0	38.3	164.3	4.3		
1935	SW		17	6680		22/05/2001								1.5	103.6	39.0	175.2	4.9		
1936	SW		18	7800		22/05/2001								1.5	102.5	38.4	167.7	4.7		
1937	SW		1	1770		23/05/2001								1.5	145.0	35.6	178.2	4.4		
1938	SW		8	4170		23/05/2001								1.4	143.6	38.1	175.1	4.9		
1939	SW		17	6680		23/05/2001														
1940	SW		18	7800		23/05/2001								1.5	138.1	38.1	169.9	4.3		
2000	SW			0		11/05/2001	09:50			13.9	757			1.2	160.6	49.6	174.3	4.9		
2001	SW			240		11/05/2001	10:05			13.6	753			1.7	220.8	67.0	241.2	5.5		
2002	SW		11	490		11/05/2001	10:14			13.8	758			1.6	166.1	52.5	180.0	4.6		
2003	SW			700		11/05/2001	10:23			13.8	758			1.3	168.0	52.6	181.4	5.0		
2004	SW		12	940		11/05/2001	10:31			14	757			1.2	162.1	49.3	176.4	4.5		
2005	SW		3	1240		11/05/2001	11:05			14.2	761			1.4	161.0	51.2	175.1	4.7		
2006	SW			1420		11/05/2001	11:11			13.9	757			1.3	161.7	50.7	174.8	5.0		
2007	SW		2	1610		11/05/2001	11:20			13.8	755			1.6	159.5	49.7	171.3	3.9		
2008	SW			1840		11/05/2001	11:31			13.7	753			1.3	160.3	50.4	173.1	4.6		
2009	SW			1940		11/05/2001	12:17			14.3	759			1.3	161.5	50.5	175.4	4.7		
2010	SW		13	1990		11/05/2001	12:26			14.2	758			1.3	159.7	51.8	171.3	5.4		
2011	SW			2080		11/05/2001	12:35			14.1	757			1.5	169.4	54.3	183.2	4.9		
2012	SW			2190		11/05/2001	12:43			14.4	764			1.4	166.3	53.4	180.0	5.0		
2013	SW		14	2300		11/05/2001	12:48			14.5	764			1.3	159.5	51.5	172.3	5.1		
2014	SW			2420		11/05/2001	12:56			14.6	766			1.3	161.6	50.3	173.7	4.7		
2015	SW			2520		11/05/2001	13:03			14.6	765			1.4	161.9	49.1	172.9	4.0		
2016	SW		6	2680		11/05/2001	13:10			14.5	762			1.3	158.7	49.7	179.1	5.5		
2017	SW			2830		11/05/2001	13:17			14.7	763			1.4	162.1	51.3	175.5	5.2		
2018	SW		6B	2960		11/05/2001	13:24			14.8	761			1.3	157.6	49.3	174.2	4.6		
2019	SW			3120		11/05/2001	13:37			15.2	764			1.4	159.2	52.2	169.9	4.5		
2020	SW			3400		11/05/2001	13:46			15.4	763			1.4	155.7	43.5	169.6	4.3		
2021	SW		15	3540		11/05/2001	13:54			15.7	766			1.4	153.7	45.4	168.8	4.8		
2022	SW			3630		11/05/2001	16:10			17.4	784			1.3	141.9	41.6	177.5	4.6		
2023	SW		10	3770		11/05/2001	16:29			1										

Units	Ca	Cu	Cd	Cr	K	Mg	Nb	Zn	Pb	St	Mn	Si	Fe	Ba	Al	Ni	B	TCM	TCA	CTC	TCE	PCE
Det Limit	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.03	< 0.2	< 0.02	< 0.02	< 0.02	< 0.03	< 0.02	< 0.3	< 0.08	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sample No.	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/λ	µg/λ	µg/λ	µg/λ	µg/λ
1870	95.59	< 0.02	< 0.02	< 0.01	14.9	19.5	132.9	0.03	< 0.2	0.40	< 0.02	5.05	0.06	0.03	< 0.3	< 0.08	0.58	0.8	0.3	0.2	1.1	0.2
1871	96.9	< 0.02	< 0.02	< 0.01	16	20.2	138.4	0.05	< 0.2	0.41	< 0.02	5.35	0.07	0.03	< 0.3	< 0.08	0.61	0.6	0.3	0.2	0.8	0.2
1872	52.68	< 0.02	< 0.02	< 0.01	12.4	10.6	91.95	0.05	< 0.2	0.22	< 0.02	3.04	0.03	0.02	< 0.3	< 0.08	0.34	0.9	0.4	0.2	1.8	0.4
1873	86.99	< 0.02	< 0.02	< 0.01	14.6	18.1	115.9	0.05	< 0.2	0.37	< 0.02	4.91	0.10	0.03	< 0.3	< 0.08	0.56					
1874																		1.1	0.4	0.2	1.4	0.4
1875	100.8	< 0.02	< 0.02	< 0.01	15.1	20.4	129.4	0.05	< 0.2	0.42	< 0.02	5.38	0.10	0.03	< 0.3	< 0.08	0.62	0.5	0.3	0.2	1.0	0.3
1876																		0.6	0.3	0.2	0.7	0.2
1877	96.91	< 0.02	< 0.02	< 0.01	14	20.6	117.9	0.05	< 0.2	0.42	< 0.02	5.26	0.07	0.03	< 0.3	< 0.08	0.59	0.6	0.3	0.2	1.1	0.2
1878	99.28	< 0.02	< 0.02	< 0.01	14.2	21.1	117.3	0.05	< 0.2	0.43	< 0.02	5.33	0.11	0.03	< 0.3	< 0.08	0.61	0.8	0.4	0.2	1.6	0.3
1879	98.51	< 0.02	< 0.02	< 0.01	13.9	21	116.7	0.04	< 0.2	0.41	< 0.02	5.33	0.06	0.03	< 0.3	< 0.08	0.62	0.8	0.4	0.2	2.1	3.5
1880	98.23	< 0.02	< 0.02	< 0.01	15.2	19.9	127.3	0.04	< 0.2	0.42	< 0.02	5.17	0.07	0.03	< 0.3	< 0.08	0.60	0.4	0.2	0.2	0.8	0.8
1881	103.7	< 0.02	< 0.02	< 0.01	15.5	21.7	134	0.06	< 0.2	0.43	< 0.02	5.47	0.07	0.03	< 0.3	< 0.08	0.63	0.7	0.3	0.2	1.5	1.5
1882	40.8	< 0.02	< 0.02	< 0.01	11.6	8.02	72.4	< 0.03	< 0.2	0.17	< 0.02	2.52	< 0.02	0.01	< 0.3	< 0.08	0.24	2.2	0.8	0.2	1.5	1.2
1883	107	< 0.02	< 0.02	< 0.01	18.2	22.1	138.2	0.04	< 0.2	0.42	< 0.02	5.98	0.07	0.04	< 0.3	< 0.08	0.58	0.5	0.3	0.2	1.6	0.9
1884	68.25	< 0.02	< 0.02	< 0.01	13.7	14.1	106.2	< 0.03	< 0.2	0.29	< 0.02	3.91	< 0.02	0.02	< 0.3	< 0.08	0.41	0.6	0.3	0.2	2.1	1.5
1885	106.2	< 0.02	< 0.02	< 0.01	15.2	22.8	134.7	0.05	< 0.2	0.43	< 0.02	5.97	0.06	0.04	< 0.3	< 0.08	0.60	0.6	0.3	0.2	2.5	1.3
1886	104.7	< 0.02	< 0.02	< 0.01	15.7	22	136.1	0.04	< 0.2	0.43	< 0.02	5.89	0.05	0.04	< 0.3	< 0.08	0.60	0.7	0.3	0.2	2.4	1.3
1887	103.2	< 0.02	< 0.02	< 0.01	15.8	21.7	131	0.04	< 0.2	0.43	< 0.02	5.82	0.07	0.04	< 0.3	< 0.08	0.59	0.6	0.3	0.2	5.5	1.4
1888	107.4	< 0.02	< 0.02	< 0.01	15.6	21.5	132.4	0.05	< 0.2	0.43	< 0.02	5.95	0.08	0.04	< 0.3	< 0.08	0.60	0.2	0.2	0.2	2.2	0.5
1889	101.2	< 0.02	< 0.02	< 0.01	14.6	19.8	121.4	0.05	< 0.2	0.39	< 0.02	5.44	0.04	0.04	< 0.3	< 0.08	0.59	0.6	0.3	0.2	3.0	1.0
1890	36.73	< 0.02	< 0.02	< 0.01	9.23	8.86	65.27	< 0.03	< 0.2	0.17	< 0.02	2.85	0.02	0.01	< 0.3	< 0.08	0.27	0.5	0.3	0.2	3.7	1.0
1891	103.2	< 0.02	< 0.02	< 0.01	14.7	20.6	115.9	0.03	< 0.2	0.41	< 0.02	5.58	0.03	0.04	< 0.3	< 0.08	0.60	0.5	0.3	0.2	3.4	0.9
1892	103.4	< 0.02	< 0.02	< 0.01	14.7	19.9	121	0.05	< 0.2	0.41	< 0.02	5.53	0.05	0.04	< 0.3	< 0.08	0.60	0.3	0.2	0.2	2.9	0.7
1893	105.7	< 0.02	< 0.02	< 0.01	15.3	20.9	121.6	0.05	< 0.2	0.41	< 0.02	5.74	0.03	0.04	< 0.3	< 0.08	0.60	0.5	0.3	0.2	2.7	0.7
1933	112	< 0.02	< 0.02	< 0.01	14.2	24.5	85	< 0.03	< 0.2	0.49	< 0.02	3.35	< 0.02	0.04	< 0.3	< 0.08		1.5	0.0	0.1	0.9	0.9
1934	112	< 0.02	< 0.02	< 0.01	14.1	23.7	86.3	< 0.03	< 0.2	0.47	< 0.02	2.71	< 0.02	0.03	< 0.3	< 0.08		3.1	0.1	0.2	1.3	2.8
1935	115	< 0.02	< 0.02	< 0.01	14	23.9	84.6	< 0.03	< 0.2	0.48	< 0.02	2.36	< 0.02	0.03	< 0.3	< 0.08		1.3	0.3	0.1	3.3	2.8
1936	113.7	< 0.02	< 0.02	< 0.01	13.7	24.1	79.49	< 0.03	< 0.2	0.47	< 0.02	2.22	< 0.02	0.03	< 0.3	< 0.08		6.7		0.4	1.3	3.3
1937	129.3	< 0.02	< 0.02	< 0.01	15.9	26.5	92.53	0.03	< 0.2	0.54	< 0.02	2.21	< 0.02	0.03	< 0.3	< 0.08		7.3	1.2	0.5	2.2	3.1
1938	127.1	< 0.02	< 0.02	< 0.01	15.8	25.1	90.15	0.03	< 0.2	0.51	< 0.02	1.79	< 0.02	0.03	< 0.3	< 0.08					0.3	2.0
1939	126.8	< 0.02	< 0.02	< 0.01	15.3	25	89.82	< 0.03	< 0.2	0.49	< 0.02	1.37	< 0.02	0.03	< 0.3	< 0.08		1.1	0.7		6.7	4.4
1940	124.6	< 0.02	< 0.02	< 0.01	15.6	24.6	87.51	< 0.03	< 0.2	0.49	< 0.02	1.29	< 0.02	0.03	< 0.3	< 0.08					1.4	3.1
2000	128.5	< 0.02	< 0.02	< 0.01	20.3	22.9	101.6	0.04	< 0.02	0.49	< 0.02	3.47	< 0.02	0.03	< 0.3	< 0.08		0.7			1.0	2.8
2001	122.2	< 0.02	< 0.02	< 0.01	17.6	24.4	93	0.05	< 0.02	0.49	< 0.02	3.56	< 0.02	0.03	< 0.3	< 0.08		1.6		0.1	0.8	
2002	129.3	< 0.02	< 0.02	< 0.01	22.2	24.7	95.49	0.06	< 0.02	0.51	< 0.02	3.50	< 0.02	0.03	< 0.3	< 0.08		1.7		0.1	0.5	4.7
2003	127.8	< 0.02	< 0.02	< 0.01	26.4	25.1	92.94	0.05	< 0.02	0.50	< 0.02	3.55	< 0.02	0.03	< 0.3	< 0.08		0.9	0.1		1.3	20.0
2004	122.5	< 0.02	< 0.02	< 0.01	22.6	24.2	77.43	0.05	< 0.02	0.50	< 0.02	3.47	< 0.02	0.03	< 0.3	< 0.08					0.8	3.9
2005	125.7	< 0.02	< 0.02	< 0.01	22.4	25	108	0.07	< 0.02	0.49	< 0.02	3.57	< 0.02	0.03	< 0.3	< 0.08		2.4		0.1	1.1	2.0
2006	123.3	< 0.02	< 0.02	< 0.01	25.3	24.3	113.7	0.06	< 0.02	0.50	< 0.02	3.52	< 0.02	0.03	< 0.3	< 0.08		1.4	0.2	0.0	1.7	4.8
2007	123.3	< 0.02	< 0.02	< 0.01	24.3	25	101.7	0.05	< 0.02	0.48	< 0.02	3.47	< 0.02	0.03	< 0.3	< 0.08		0.9		0.0	0.5	6.2
2008	121.7	< 0.02	< 0.02	< 0.01	27.8	23.2	92.53	0.06	< 0.02	0.48	< 0.02	3.38	< 0.02	0.03	< 0.3	< 0.08		1.4		0.1	0.9	3.0
2009	116.6	< 0.02	< 0.02	< 0.01	24.3	22.6	92.33	0.06	< 0.02	0.45	< 0.02	3.28	< 0.02	0.02	< 0.3	< 0.08		1.2		0.1	0.4	1.6
2010	115.4	< 0.02	< 0.02	< 0.01	20.3	24.6	115.3	0.05	< 0.02	0.49	< 0.02	3.63	< 0.02	0.02	< 0.3	< 0.08		1.5		0.1	0.6	0.9
2011	114	< 0.02	< 0.02	< 0.01	25.8	22	119.9	0.05	< 0.02	0.47	< 0.02	3.43	< 0.02	0.02	< 0.3	< 0.08		0.6			0.5	2.7
2012	105.1	< 0.02	< 0.02	< 0.01	23.4	24.5	103.1	0.05	< 0.02	0.45	< 0.02	3.22	< 0.02	0.02	< 0.3	< 0.08		1.4	0.2	0.1	1.3	3.6
2013	105.4	< 0.02	< 0.02	< 0.01	40.5	27.5	153	0.05	< 0.02	0.47	< 0.02	3.54	< 0.02	0.02	< 0.3	< 0.08		1.8	0.2	0.1	1.2	8.5
2014	103.3	< 0.02	< 0.02	< 0.01	39.9	27.1	162	0.06	< 0.02	0.49	< 0.02	3.60	< 0.02	0.02	< 0.3	< 0.08		0.9		0.0	1.1	3.0
2015	99.36	< 0.02	< 0.02	< 0.01	39.9	26.9	171.1	0.06	< 0.02	0.49	< 0.02	3.57	< 0.02	0.02	< 0.3	< 0.08		1.3		0.0	1.4	2.9
2016	99.54	< 0.02	< 0.02	< 0.01	44.6	29.1	190.7	0.06	< 0.02	0.51	< 0.02	3.83	< 0.02	0.02	< 0.3	< 0.08		0.2	0.0	0.1	1.5	2.5
2017	99.93	< 0.02	< 0.02	< 0.01	41.3	28.6	176	0.05	< 0.02	0.51	< 0.02	3.82	< 0.02	0.03	< 0.3	< 0.08		1.2		0.1	1.0	3.3
2018	99.71	< 0.02	< 0.02	< 0.01	33.5	27.9	169.5	0.06	< 0.02	0.50	< 0.02	3.82	< 0.02	0.03	< 0.3	< 0.08		0.6			0.6	1.9
2019	101.8	< 0.02	< 0.02	< 0.01	18.2	21.8	84.34	0.06	< 0.02	0.45	< 0.02	3.41	< 0.02	0.03	< 0.3	< 0.08		2.8	0.1	0.1	5.0	2.9
2020	99.03	< 0.02	< 0.02	< 0.01	31.8	23.6	114.6	0.06	< 0.02	0.45	< 0.02	3.34	< 0.02	0.03	< 0.3	< 0.08		1.1	0.1	0.1	2.0	2.5
2021	96.32	< 0.02	< 0.02	< 0.01	22	21.8	88.4	0.05	< 0.02													

Units Det Limit Sample No.	lead as Pb μg/L ≤0.4	mercury as Hg μg/L ≤0.01	cadmium as Cd μg/L ≤0.1	chromium as Cr μg/L ≤0.5	arsenic as As μg/L ≤1	copper as Cu μg/L ≤0.5	zinc as Zn μg/L ≤10	nickel as Ni μg/L ≤5	1,1,1,2-Tetrachloro μg/L ≤0.2	1,1,1,2-Tetrachloro μg/L ≤0.2	1,1,1,1-Trichloroetha μg/L ≤0.2	1,1,2-Trichloroetha μg/L ≤0.2	1,1-Dichloroethane μg/L ≤0.2	1,1-Dichloroethene μg/L ≤0.3	1,2,3-Trichloroprop μg/L ≤0.2	1,2,4-Trimethylbenz μg/L ≤10	1,2-Dibromo-3-Chlor μg/L ≤0.6	1,2-Dibromoethane μg/L ≤0.2	1,2-Dichlorobenzene μg/L ≤0.3	1,2-Dichloroethane μg/L ≤1	1,2-Dichloropropan μg/L ≤1
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3028	≤0.4	0.05	≤0.1	≤0.5	3	13.6	112	63	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3051	0.5	≤0.01	≤0.1	1.9	3	12.1	33	55	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3057	0.9	0.01	≤0.1	1.4	2	11.5	28	50	≤0.2	≤0.2	0.3	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
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3005	158.0	0.02	≤0.1	1.5	≤1	22.3	27	6	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3006	23.5	0.02	≤0.1	0.6	≤1	5.8	10	≤5	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3007	4.5	0.04	0.1	3.0	≤1	13.2	45	28	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3008	5.5	0.03	0.1	2.9	≤1	10.2	34	9	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3027	≤0.4	0.02	2.7	≤0.5	3	5.5	168	304													
3029	≤0.4	0.02	1.2	≤0.5	3	6.1	≤10	183													
3030	6.3	0.02	≤0.1	≤0.5	5	18.1	95	142													
3031	≤0.4	0.02	≤0.1	≤0.5	3	7.5	≤10	≤5	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3032	1.4	0.02	≤0.1	2.0	33	2.6	14	49	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr
3033	0.8	0.09	0.1	0.7	6	2.6	35	71	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr

Units Det Limit	1,3,5-Trimethylben. µg/λ ≤10	1,3-Dichlorobenzene µg/λ ≤0.2	1,3-Dichloropropane µg/λ ≤0.2	1,4-Dichlorobenzene µg/λ ≤0.2	2,2-Dichloropropane µg/λ ≤0.4	2-Chlorotoluene µg/λ ≤0.1	4-Chlorotoluene µg/λ ≤0.1	4-Isopropyltoluene µg/λ ≤0.1	Benzene µg/λ ≤0.1	Bromobenzene µg/λ ≤0.4	Bromochloromethane µg/λ ≤0.3	Bromo-dichloromethane µg/λ ≤0.2	Bromoform µg/λ ≤0.2	Bromomethane µg/λ nr	Carbon tetrachloride µg/λ ≤0.2	Chlorobenzene µg/λ ≤0.4	Chloro-dibromomethane µg/λ ≤0.2	Chloroform µg/λ ≤0.2	cis-1,3-Dichloropropane µg/λ ≤0.2	cis-1,2-Dichloroethane µg/λ ≤0.2	Dibromomethane µg/λ ≤0.2
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3028	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	0.77	<0.2	0.57	<0.2
3051	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	nr	<0.2	1.3	<0.2
3057	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	nr	<0.2	2.3	<0.2
1861																					
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3005	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
3006	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	24	<0.2
3007	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	2.5	<0.2	<0.2	<0.2
3008	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	3.1	<0.2	<0.2	<0.2
3027																					
3029																					
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3031	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	0.82	<0.2
3032	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	0.51	<0.2
3033	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	0.58	<0.2

Units Det Limit Sample No.	Dichloromethane μg/L ≤2	Ethenylbenzene(st μg/L ≤0.1	Ethylbenzene μg/L ≤0.1	Iso-propylbenzene μg/L ≤0.1	M-P-Xylene μg/L ≤0.3	MTBE μg/L ≤0.3	Naphthalene μg/L ≤100	n-Butylbenzene μg/L ≤0.2	n-Propylbenzene μg/L ≤0.1	O-Xylene μg/L ≤0.1	sec-Butylbenzene μg/L ≤0.1	tert-Butylbenzene μg/L ≤0.2	Tetrachloroethene μg/L ≤0.1	Toluene μg/L ≤4	trans-1,2-Dichloroe μg/L ≤0.2	Trichloroethene μg/L ≤0.1	Trichlorofluorometit μg/L ≤0.3	Vinyl Chloride μg/L ≤0.2
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3028	9.2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<4	<0.2	0.81	<0.3	
3051	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.84	<4	<0.2	0.72	<0.3	
3057	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.8	<4	<0.2	2.67	<0.3	
1861																		
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1865																		
1866																		
1867																		
3005	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<4	<0.2	0.11	<0.3	
3006	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<4	0.32	25	<0.3	
3007	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.34	<4	<0.2	0.18	<0.3	
3008	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.28	<4	<0.2	0.23	<0.3	
3027																		
3029																		
3030																		
3031	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.23	<4	0.3	0.21	<0.3	
3032	<2	<0.1	<0.1	<0.1	<0.3	0.31	<100	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<4	<0.2	0.12	<0.3	
3033	<2	<0.1	<0.1	<0.1	<0.3	0.52	<100	<0.2	<0.1	<0.1	<0.1	<0.2	0.62	<4	<0.2	0.89	<0.3	

Units Det Limit Sample No.	Type	Location	Profile	Distance down- = stream	Screen Depth m	Date Sampled	Time	pH	D.O. mg/l	Temperature °C	Conductivity µS/cm	Eh mV	Alkalinity as CaCO ₃ mg/l	F mg/l 0.1	Cl mg/l 0.1	NO ₃ mg/l 0.1	SO ₄ mg/l 0.1	PO ₄ mg/l 0.1	SI calcite	ppCO ₂
3034	RB	RB23		2520	98	25/07/2001		7.3	4.5	19.7	435	116		2.9	23.4	22.2	68.1	2.5		
3035	RB	RB22	6	2630	84	25/07/2001		7.15	3.5	19.4	974	334.3	403	1.2	171.9	16.0	143.9	2.1	-0.017	1.55
3036	RB	RB20	6	2630	117	25/07/2001		7.39	2	19.3	945	370.9	373	1.4	161.8	17.1	154.0	2.4	0.183	1.82
3037	RB	RB79	19	2950	41	25/07/2001		7.22	2.5	20.9	647	230.4	589	1.3	37.7	16.3	155.8	2.5	0.349	1.46
3038	RB	RB24	19	2950	27	25/07/2001		7.06	2	20.5	516	170.5	285	1.5	47.1	19.0	98.4	2.8	-0.215	1.61
3039	RB	RB5	1	1770	40	26/07/2001	11:30	6.83	1	21.8	835	210.6	390	1.1	89.9	4.5	228.3	1.8	-0.083	1.25
3040	RB	RB6	1	1770	28	26/07/2001		7.52	2	24.3	844	119	299	1.2	144.4	24.7	161.2	2.5	0.360	2.05
3041	RB	RB10	2	1570	65	26/07/2001		7.29	5	23.4	367	332	181	0.7	14.0	27.5	67.5	2.2	-0.299	2.04
3042	RB	RB7	2	1570	89	26/07/2001		7.01	4	25.3	333	454.6	170	1.4	13.4	23.1	63.5	2.2	-0.779	1.79
3043	RB	RB16	4	1390	30	26/07/2001	15:21	7.26	5	31	666	386	322	1.2	25.7	7.6	48.9	2.0	0.108	1.76
3044	RB	RB14	4	1390	43	26/07/2001	17:00	7.53	2	29.6	628	467	235	3.5	32.2	15.5	141.7	2.2	0.217	2.17
3045	RB	RB93	18	7800	55	27/07/2001	10:30	7.01	2	19.5	986	131	521	1.6	83.6	9.3	162.0	2.0	0.273	1.30
3046	RB	RB90	18	7800	35	27/07/2001	12:20	8.03	3.5	20.1	672	78	353	1.5	80.0	8.7	86.6	6.3	0.856	2.49
3047	RB	RB81	15	3600	50	30/07/2001	12:00	7.44	3	21	459	399.8	243	0.7	40.1	69.1	119.2	2.1	0.057	2.06
3048	RB	RB80	15	3600	58	30/07/2001	12:40	7.81	3	20.5	501	377	177	0.6	48.9	64.8	212.9	1.8	0.558	2.57
3049	RB	RB39	10	3990	93	30/07/2001	14:14	6.98	3.5	23.6	795	346	358	0.3	85.5	20.9	146.5	2.0	0.065	1.43
3050	RB	RB36	10	3990	75	30/07/2001	14:48	7.05	2.5	28.2	845	345	381	0.1	45.1	24.0	143.2	2.2	0.150	1.48
3052	RB	RB35	9	4290	100	30/07/2001	16:42	6.5		23.4	1475	356	437	2.5	76.3	133.2	590.7	2.1	0.003	0.87
3053	RB	RB32	9	4290	99.5	30/07/2001	17:16	7.43		22.6	672	231	210	0.3	47.6	107.0	131.0	2.1	0.173	2.11
3054	RB	RB89	17	6680	44	31/07/2001	11:13	7.26	5	20	731	190	399	0.9	64.8	13.6	156.3	2.2	0.440	1.67
3055	RB	RB86	17	6680	37	31/07/2001	12:33	6.9	1.5	19.9	1144	316	366	0.9	207.6	90.4	159.0	2.2	0.089	1.34
3056	RB	RB25	7	6140	88	31/07/2001	13:50	7.27	5.5	23.88	965	180	266	1.9	99.4	10.2	330.8	1.9	0.236	1.85
3058	RB	RB82	16	5600	69	01/08/2001	13:09	6.85	2	22.1	982	110.5	408	1.3	83.7	4.6	272.4	2.0	0.071	1.25
3059	RB	RB85	16	5600	51	01/08/2001	14:50	6.79	1.5	19.8	1167	322		0.6	117.2	29.0	246.4	1.8		
3060	RB	RB67	12	940	63	02/08/2001	11:30	6.86	5.5	21.7	305	373	130	1.0	18.8	19.8	63.6	2.2	-0.990	1.75
3061	RB	RB68	12	940	58	02/08/2001	14:23	6.77	1.5	17.9	466	377	260	0.9	9.4	14.9	99.4	2.1	-0.382	1.36
3062	RB	RB27	8	4170	132	07/08/2001	10:23	6.1	6	16.6	980	414	298	1.7	152.5	47.6	314.9	2.1	-0.723	0.63
3063	RB	RB28	8	4170	124	07/08/2001	11:00	6.23	1.5	16.5	975	413	440	1.6	128.6	47.1	292.4	2.0	-0.456	0.59
3064	RB	RB29	8	4170	122	07/08/2001	12:13	6.51	3	21.1	1034	375.4	345	1.9	145.3	39.4	277.3	2.4	-0.267	0.98
3065	RB	RB41	8	4170	75	07/08/2001	12:48	5.37	1.5	18.7	937	407	111	181.1	40.7	215.5	464.5	1.9	-2.019	0.33
3066	RB	RB95	8	4170	15	07/08/2001	15:00	5.7	3.5	17.1	845	463	151	151.2	55.6	180.9	391.6	1.8	-1.603	0.53
3067	RB	RB44	8	4170	21	08/08/2001	10:50	5.83	4	18.4	979	453	204	177.5	43.0	212.3	446.3	1.9	-1.304	0.53
3068	RB	RB40	8	4170	95	08/08/2001	11:23	5.88	3.5	19.4	890	108	83	174.1	41.8	232.1	469.6	1.5	-1.653	0.97
3069	RB	RB42	8	4170	40	08/08/2001	12:25	5.69	3.5	17.9	907	270.7	74	166.8	42.6	233.0	467.6	1.9	-1.884	0.83
3070	RB	RB31	8	4170	125.5	08/08/2001	12:56	5.72	2.5	21.3	1011	136.1	82	197.6	42.9	232.4	469.6	2.7	-1.816	0.81
3071	RB	RB43	8	4170	33.5	08/08/2001	15:05	5.75	2.5	17.9	912	390	125	183.4	40.7	223.1	462.8	1.8	-1.610	0.66
3072	RB	RB30	8	4170	128	08/08/2001	15:56	6.71	2.5	24.2	997	351	266	34.8	105.3	87.5	226.2	1.9	-0.303	1.29
Rb 65	RB	RB65	11	490	44	17/07/2001	17:00							0.3	28.4	63.2	93.3	1.4		
Rb 66	RB	RB66	11	490	72	17/07/2001	17:00							0.7	56.0	9.7	47.3	1.6		
Rb 69	RB	RB69	12	940	61	02/08/2001	14:00	6.88	4.5	20.2	472	367	309	1.0	9.5	12.9	93.6	1.5		1.40
Rb 70	RB	RB70	12	940	40	02/08/2001	12:30	7.63	4.5	21.4	549	346	226	2.2	35.0	4.0	141.9	1.7		2.28
Rb 77	RB	RB77	14	2290	49	24/07/2001	17:35		2.5		746			1.5	133.7	4.9	135.7	4.4		
Rb 78	RB	RB78	14	2290	55	24/07/2001	17:35		3		743			1.4	130.7	6.4	140.3	4.8		
Rb 83	RB	RB83	16	5600	62	01/08/2001	14:08	6.74	3.5	14.06	938	273	201	1.1	62.5	130.8	401.3	3.4		1.44
Rb 84	RB	RB84	16	5600	54	01/08/2001	14:23	6.56	4.5	14.23	815	314	65	0.9	50.3	73.5	431.9	4.0		1.75
Rb 87	RB	RB87	17	6680	32	31/07/2001	12:22	7.41	5	19.5	790	303	238	1.3	124.1	52.0	161.6	4.1	0.236	2.04
Rb 88	RB	RB88	17	6680	40	31/07/2001	12:06	7.3	3	19.5	605	276.5	330	2.3	42.2	12.7	111.1	1.7	0.271	1.79
Rb 91	RB	RB91	18	7800	55	27/07/2001	11:35	8.05	4	21.3	789	231.4	327	1.7	116.0	8.1	69.0	3.8	0.949	2.54
Rb 92	RB	RB92	18	7800	81	27/07/2001	11:05	7.14	2.5	20.5	1053	130	636	2.0	78.6	10.3	167.1	1.5	0.544	1.34
Rb																				

Units Det Limit Sample No.	Cg mg/l < 0.02	Cu mg/l < 0.02	Co mg/l < 0.02	Cr mg/l < 0.02	K mg/l <0.02	Mg mg/l <0.02	Na mg/l <0.02	Zn mg/l < 0.03	Pb mg/l < 0.2	St mg/l <0.02	Mn mg/l < 0.02	Si mg/l <0.02	Fe mg/l < 0.03	Ba mg/l < 0.02	Al mg/l < 0.3	Ni mg/l < 0.08	B mg/l <0.02	TCM µg/l <0.1	TCA µg/l <0.1	CTC µg/l <0.1	TCE µg/l <0.1	PCE µg/l <0.1
3034	77.19	< 0.02	< 0.02	< 0.01	20	12	15.93	< 0.03	< 0.2	0.43	1.12	3.74	0.29	0.11	< 0.3	< 0.08		<0.2	<0.2		<0.1	<0.1
3035	76.56	< 0.02	< 0.02	< 0.01	11.3	7.98	194.9	0.04	< 0.2	0.22	0.24	6.32	< 0.02	0.18	< 0.3	< 0.08		<0.2	0.3		0.2	0.4
3036	75.43	< 0.02	< 0.02	< 0.01	10.5	7.37	191.6	0.04	< 0.2	0.22	0.13	6.24	0.02	0.17	< 0.3	< 0.08		<0.2	<0.2		1.2	0.3
3037	103.6	< 0.02	< 0.02	< 0.01	18.1	24.8	38.34	0.03	< 0.2	0.48	2.91	7.11	0.08	0.13	< 0.3	< 0.08		<0.2	<0.2		0.3	0.2
3038	84.45	< 0.02	< 0.02	< 0.01	15.6	12.6	39.66	0.04	< 0.2	0.36	2.59	6.05	0.18	0.08	< 0.3	< 0.08		<0.2	<0.2		0.3	0.2
3039	142.1	< 0.02	< 0.02	< 0.01	11.9	22.4	54.12	0.03	< 0.2	0.42	0.40	7.44	0.64	0.08	< 0.3	< 0.08		<0.2	<0.2		0.2	<0.1
3040	104.9	< 0.02	< 0.02	< 0.01	12.6	17.5	81.22	0.06	< 0.2	0.42	4.23	5.19	2.55	0.13	< 0.3	< 0.08		0.3	<0.2		0.7	0.1
3041	64.5	< 0.02	< 0.02	< 0.01	4.31	7.84	15.6	0.06	< 0.2	0.15	0.04	4.53	0.57	0.05	0.68	< 0.08		11.0	<0.2		<0.1	<0.1
3042	43.36	< 0.02	< 0.02	< 0.01	4.69	4.15	23.77	< 0.03	< 0.2	0.23	0.03	1.82	0.06	0.13	< 0.3	< 0.08		5.6	<0.2		<0.1	<0.1
3043	99.17	< 0.02	< 0.02	< 0.01	4.48	9.06	25.59	< 0.03	< 0.2	0.22	6.06	7.98	0.06	0.13	< 0.3	< 0.08		<0.2	<0.2		1.4	2.3
3044	93.79	< 0.02	< 0.02	< 0.01	12.2	12.2	29.81	0.04	< 0.2	0.30	0.76	8.31	0.05	0.07	< 0.3	< 0.08		<0.2	<0.2		1.7	2.8
3045	159.3	< 0.02	< 0.02	< 0.01	15.4	23	56.31	< 0.03	< 0.2	0.63	4.12	8.08	10.10	0.11	< 0.3	< 0.08		<0.2	<0.2		<0.1	<0.1
3046	85.97	< 0.02	< 0.02	< 0.01	23.1	13.9	55.9	< 0.03	< 0.2	0.40	2.29	7.57	0.18	0.05	< 0.3	< 0.08		<0.2	<0.2		0.4	<0.1
3047	77.2	< 0.02	< 0.02	< 0.01	9.09	12.8	17.2	< 0.03	< 0.2	0.18	0.05	4.68	0.06	0.06	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
3048	143.3	< 0.02	< 0.02	< 0.01	10.5	24	27.5	0.07	< 0.2	0.34	1.31	5.88	1.09	0.10	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
3049	153.9	< 0.02	< 0.02	< 0.01	7.27	19.4	55.07	0.08	< 0.2	0.42	2.14	6.81	0.38	0.08	< 0.3	< 0.08		nr	<0.2		0.6	<0.1
3050	149.7	< 0.02	< 0.02	< 0.01	12.1	21.1	42.36	0.05	< 0.2	0.45	2.28	9.83	0.61	0.07	0.50	< 0.08		nr	0.6		<0.1	<0.1
3052	330.6	< 0.02	< 0.02	< 0.01	18	41.8	62.04	0.08	< 0.2	1.10	8.21	11.66	0.03	0.06	< 0.3	< 0.08		nr	110.0		52.0	0.2
3053	119.5	< 0.02	< 0.02	< 0.01	21.4	16.4	33.4	< 0.03	< 0.2	0.27	0.03	5.89	< 0.02	0.09	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
3054	172.1	< 0.02	< 0.02	< 0.01	17.9	16.7	38.99	0.15	< 0.2	0.64	4.58	13.82	2.44	0.21	0.73	< 0.08		nr	<0.2		0.6	<0.1
3055	191.3	< 0.02	< 0.02	< 0.01	18.9	20.3	136.1	0.19	< 0.2	0.66	0.67	6.97	0.24	0.10	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
3056	157.7	< 0.02	< 0.02	< 0.01	13.7	26.4	71.1	0.03	< 0.2	0.61	4.34	8.37	0.38	0.05	< 0.3	< 0.08		nr	<0.2		6.7	0.2
3058	184.6	< 0.02	< 0.02	< 0.01	18.2	25.6	61.79	0.04	< 0.2	0.64	3.44	11.85	24.06	0.12	< 0.3	< 0.08		nr	<0.2		0.1	<0.1
3059	237.2	< 0.02	< 0.02	< 0.01	31.2	29.2	91.15	0.03	< 0.02	0.68	1.92	6.03	0.09	0.05	< 0.3	< 0.08		<0.2	<0.2		0.4	<0.1
3060	49.21	< 0.02	< 0.02	< 0.01	3.39	5.48	16.66	< 0.03	< 0.02	0.18	0.31	3.93	0.51	0.06	< 0.3	< 0.08		<0.2	<0.2		0.2	0.1
3061	122.7	< 0.02	< 0.02	< 0.01	5.94	9.77	11.93	< 0.03	< 0.02	0.32	0.81	4.91	0.11	0.06	< 0.3	< 0.08		<0.2	<0.2		0.1	<0.1
3062	228.6	< 0.02	< 0.02	< 0.01	20.8	23.9	85.17	0.17	< 0.02	0.83	3.31	8.52	0.30	0.07	< 0.3	< 0.08		<0.2	<0.2		<0.1	<0.1
3063	212.3	< 0.02	< 0.02	< 0.01	18.6	23.1	77.29	0.10	< 0.02	0.75	3.41	7.95	0.10	0.08	< 0.3	< 0.08		<0.2	<0.2		<0.1	<0.1
3064	219.5	< 0.02	< 0.02	< 0.01	19.1	22.8	88.05	0.04	< 0.02	0.77	3.28	8.36	0.04	0.09	< 0.3	< 0.08		<0.2	<0.2		<0.1	<0.1
3065	166.8	< 0.02	< 0.02	< 0.01	16.8	37.7	71.87	0.30	< 0.02	0.50	7.95	33.08	0.84	0.10	32.99	< 0.08		4.1	47.0		62.0	<0.1
3066	149.5	0.093	< 0.02	< 0.01	15.8	33.3	69.43	0.28	< 0.02	0.46	6.70	27.20	0.11	0.10	26.59	< 0.08		3.1	51.0		56.0	<0.1
3067	163	0.067	< 0.02	< 0.01	14.6	36	62.78	0.36	< 0.02	0.50	7.75	32.61	0.73	0.09	32.11	< 0.08		3.6	47.0		61.0	0.2
3068	160	< 0.02	< 0.02	< 0.01	15.1	36.3	63.39	0.23	< 0.02	0.49	7.41	31.48	0.18	0.08	29.92	< 0.08		4.2	54.0		64.0	<0.1
3069	163.5	< 0.02	< 0.02	< 0.01	15.9	38.6	88.99	0.27	< 0.02	0.51	7.55	30.43	0.98	0.10	32.50	< 0.08		2.3	41.0		55.0	<0.1
3070	160.9	< 0.02	< 0.02	< 0.01	13	37.9	53.36	0.23	< 0.02	0.50	7.88	30.40	0.16	0.09	32.10	< 0.08		2.4	>10		>10	<0.1
3071	158.2	0.038	< 0.02	< 0.01	17.7	40.9	68.18	0.23	< 0.02	0.51	7.66	30.16	0.34	0.10	32.39	< 0.08		2.9	38.0		46.0	<0.1
3072	165.2	< 0.02	< 0.02	< 0.01	15.4	23.5	50.36	0.07	< 0.02	0.45	2.38	8.33	0.02	0.09	< 0.3	< 0.08		<0.2	2.2		23.0	0.2
Rb 65	106.7	< 0.02	< 0.02	< 0.01	5.46	5.54	17.23	0.06	< 0.2	0.07	0.17	6.14	1.33	0.13	0.89	< 0.08						
Rb 66	125.1	< 0.02	< 0.02	< 0.01	9.42	12.9	41.7	< 0.03	< 0.2	0.33	2.81	7.38	0.23	0.32	< 0.3	< 0.08						
Rb 69																						
Rb 70																						
Rb 77	100.4	< 0.02	< 0.02	< 0.01	16.7	19.7	91.33	0.04	< 0.2	0.42	1.69	7.25	0.11	0.07	< 0.3	< 0.08						
Rb 78	94.75	< 0.02	< 0.02	< 0.01	17	19.4	94.38	0.03	< 0.2	0.42	2.25	7.03	0.13	0.08	< 0.3	< 0.08						
Rb 83																						
Rb 84																						
Rb 87	127.7	< 0.02	< 0.02	< 0.01	15.6	20.3	89.65	0.05	< 0.2	0.38	0.23	5.43	0.13	0.07	< 0.3	< 0.08						
Rb 88	128.4	< 0.02	< 0.02	< 0.01	11	15.2	44.52	< 0.03	< 0.2	0.51	0.71	9.00	0.13	0.12	< 0.3	< 0.08						
Rb 91	109.8	< 0.02	< 0.02	< 0.01	18.2	20.5	80.87	0.08	< 0.2	0.48	1.18	8.60	0.67	0.07	< 0.3	< 0.08						
Rb 92	180.8	< 0.02	< 0.02	< 0.01	18.9	25.4	62.85	< 0.03	< 0.2	0.82	5.40	11.09	12.20	0.18	< 0.3	< 0.08						
Rb 96																						
5018	64.26	< 0.03	< 0.02	< 0.03	5	3.91	6.711	< 0.03	< 0.2	0.22	0.60	4.49	0.12	0.12	< 0.03	< 0.08		<0.2	<0.2		<0.1	<0.1
5012	106.70	< 0.03	< 0.02	< 0.03	7.20	15.63	20.25	< 0.03	< 0.2	0.36	4.37	7.74	0.60	0.18	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
5014	56.04	< 0.03	< 0.02	< 0.03	1.84	11.17	13.78	< 0.03	< 0.2	0.09	< 0.02	5.15	0.12	0.04	< 0.3	< 0.08		nr	<0.2		0.5	0.3
5013	166.20	< 0.03	< 0.02	< 0.03	3.33	34.59	30.22	< 0.03	< 0.2	0.26	0.03	6.30	0.06	0.03	< 0.3	< 0.08		nr	<0.2		<0.1	0.8
5015	462.10	< 0.03	< 0.02	< 0.03	13.32	47.89	513.10	< 0.03	< 0.2	1.42	5.84	6.30	0.09	0.08	< 0.3	< 0.08		nr	<0.2		<0.1	<0.1
5026	59.94	< 0.03	< 0.02	< 0.03	44.4	6.31	182.2	< 0.03	< 0.2	0.18	0.05	5.50	0.15	0.04	< 0.03	< 0.08		<0.2	<0.2		<0.1	0.6
5021	241.6	< 0.03	< 0.02	< 0.03	22.6	23.4	63.08	0.32	< 0.2	0.70	1.11	12.23	0.04	0.10	< 0.03	< 0.08		<0.2	<0.2		<0.1	<0.1
5022	108.3	< 0.03	< 0.02	< 0.03	6.16	16.8</																

Units Det Limit Sample No.	lead as Pb	mercury as Hg	cadmium as Cd	chromium as Cr	arsenic as As	copper as Cu	zinc as Zn	nickel as Ni	1,1,1,2-Tetrachloro	1,1,1,2-Tetrachloro	1,1,1-Trichloroetha	1,1,2-Trichloroetha	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloroprop	1,2,4-Trimethylben	1,2-Dibromo-3-Chlor	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropan	
	µg/λ <0.4	µg/λ <0.01	µg/λ <0.1	µg/λ <0.5	µg/λ <1	µg/λ <0.5	µg/λ <10	µg/λ <5	µg/λ <0.2	µg/λ <0.2	µg/λ <0.2	µg/λ <0.2	µg/λ <0.2	µg/λ <0.3	µg/λ <0.2	µg/λ <10	µg/λ <0.6	µg/λ <0.2	µg/λ <0.3	µg/λ <1	µg/λ <1	
3034	0.7	0.19	<0.1	0.8	5	1.4	9	11	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3035	<0.4	0.08	1.0	<0.5	1	5.6	28	21	<0.2	<0.2	0.3	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3036	1.0	0.01	1.2	0.9	1	7.4	37	22	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3037	1.5	0.07	<0.1	1.0	4	3.0	22	28	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3038	1.9	0.02	0.1	1.0	1	4.9	35	30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3039	0.6	0.07	<0.1	0.8	<1	2.6	23	17	<0.2	<0.2	<0.2	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3040	3.4	0.01	0.4	6.6	2	5.7	30	26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3041	1.2	<0.01	<0.1	0.8	<1	2.3	75	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3042	4.3	<0.01	0.1	2.6	<1	5.9	43	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3043	0.7	0.03	<0.1	1.3	5	1.3	9	27	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3044	0.5	<0.01	0.3	<0.5	1	2.0	36	9	<0.2	<0.2	<0.2	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3045	2.1	<0.01	<0.1	1.9	4	5.9	22	14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3046	2.2	0.03	<0.1	20.4	3	4.2	16	18	<0.2	<0.2	<0.2	<0.2	0.4	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3047	0.4	0.01	<0.1	1.0	<1	2.2	10	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3048	1.4	0.05	1.7	1.0	1	4.0	83	13	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3049	1.7	0.01	<0.1	1.0	<1	11.1	55	9	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n
3050	2.6	0.08	0.2	1.5	3	11.1	43	12	<0.2	<0.2	0.6	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3052	<0.4	<0.01	3.4	<0.5	8	3.1	88	39	<0.2	<0.2	110.0	<0.2	25.0	8.6	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3053	<0.4	<0.01	<0.1	<0.5	1	1.8	<10	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3054	10.0	0.04	0.2	4.1	3	17.9	93	46	<0.2	<0.2	<0.2	<0.2	0.5	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3055	9.1	0.02	0.8	5.8	<1	24.3	219	38	<0.2	<0.2	<0.2	<0.2	0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3056	<0.4	0.01	<0.1	<0.5	10	1.6	20	7	<0.2	<0.2	<0.2	<0.2	0.5	0.4	<0.2	<10	<0.6	<0.2	0.61	0.24	n	
3058	<0.4	<0.01	<0.1	1.1	3	1.3	10	14	<0.2	<0.2	<0.2	<0.2	0.3	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3059	2.6	<0.01	0.4	2.4	<1	6.4	26	13	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	0.58	n	
3060	1.6	<0.01	<0.1	1.3	6	3.0	11	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3061	<0.4	<0.01	0.1	0.6	3	2.3	17	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3062	<0.4	<0.01	0.6	<0.5	2	5.2	164	22	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3063	<0.4	0.02	0.4	<0.5	1	2.8	82	32	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3064	<0.4	0.01	0.3	<0.5	1	3.3	34	9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3065	1.8	0.03	2.1	4.9	1	27.1	294	102	<0.2	<0.2	47.0	<0.2	3.7	1.8	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3066	9.7	0.02	1.9	5.3	<1	96.9	271	100	<0.2	<0.2	51.0	<0.2	2.9	1.7	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3067	11.2	0.03	2.6	7.6	<1	70.9	429	139	<0.2	<0.2	47.0	<0.2	3.4	1.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3068	0.9	0.04	0.6	1.8	<1	9.3	241	96	<0.2	<0.2	54.0	<0.2	3.7	1.4	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3069	2.8	0.13	2.1	3.6	<1	25.5	262	99	<0.2	<0.2	41.0	<0.2	2.6	1.1	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3070	1.6	0.02	0.9	4.8	<1	10.7	187	101	<0.2	<0.2	>10	<0.2	2.7	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3071	8.5	0.03	2.2	6.9	<1	67.9	264	105	<0.2	<0.2	38.0	<0.2	3.3	1.5	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3072	<0.4	0.02	0.8	3.8	4	5.5	64	19	<0.2	<0.2	2.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
Rb 65																						
Rb 66																						
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Rb 87																						
Rb 88																						
Rb 91																						
Rb 92																						
Rb 96																						
5018	0.7	<0.0100	<0.100	<0.500	<1.00	2.7	6	<5.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5012	<0.400	NoSample	<0.0100	0.5	8	3.7	14	19	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5014	0.4	0.23	<0.100	<0.500	<1.00	<0.500	<5.00	<5.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5013	1.7	0.07	<0.100	<0.500	<1.00	1.0	8	<5.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5015	<0.400	0.01	80.6	<0.500	<1.00	3.7	25	27	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5026	19.6	0.02	<0.100	5.6	5	6.5	17	13	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5021	1.0	<0.0100	0.8	7.9	<1.00	12.5	302	21	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5022	<0.400	<0.0100	<0.100	4.0	<1.00	1.2	8	32	<0.2	<0.2	<0.2	<0.2	0.5	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5023	<0.400	<0.0100	<0.100	3.3	<1.00	1.9	19	16	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5024	0.4	<0.0100	3.7	1.7	3	69.1	451	143	<0.2	<0.2	22.0	<0.2	5.0	1.1	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
5025	<0.400	<0.0100	0.1	2.2	2	1.7	8	<5.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3009	19.7	0.03	<0.1	15.3	<1	32.5	16	16	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3010	4.6	0.02	0.5	1.4	<1	7.4	9	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3011	3.0	0.03	0.1	1.4	1	4.7	13	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0.2	<0.3	<1	n	
3012	145.0	0.07	0.2	2.0	<1	23.1	27	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<10	<0.6	<0				

Units Det Limit Sample No.	1,3,5-Trimethylben. µg/λ ≤10	1,3-Dichlorobenzer µg/λ ≤0.2	1,3-Dichloropropan µg/λ ≤0.2	1,4-Dichlorobenzer µg/λ ≤0.2	2,2-Dichloropropan µg/λ ≤0.4	2-Chlorotoluene µg/λ ≤0.1	4-Chlorotoluene µg/λ ≤0.1	4-Isopropyltoluene µg/λ ≤0.1	Benzene µg/λ ≤0.1	Bromobenzene µg/λ ≤0.4	Bromochlorometha µg/λ ≤0.3	Bromo-dichloromet µg/λ ≤0.2	Bromoform µg/λ ≤0.2	Bromomethane µg/λ nr	Carbontetrachloride µg/λ ≤0.2	Chlorobenzene µg/λ ≤0.4	Chloro-dibromomet µg/λ ≤0.2	Chloroform µg/λ ≤0.2	cis-1,3-Dichloroprof µg/λ ≤0.2	cis-1,2-Dichloroeth µg/λ ≤0.2	Dibromomethane µg/λ ≤0.2
3034	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3035	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	0.9	≤0.2
3036	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3037	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	0.3	≤0.2
3038	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	0.33	≤0.2
3039	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	16	≤0.2
3040	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	0.32	≤0.2	0.61	≤0.2
3041	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	11	≤0.2	≤0.2	≤0.2
3042	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	5.6	≤0.2	≤0.2	≤0.2
3043	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	1.9	≤0.2
3044	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	0.66	≤0.2
3045	≤10	≤0.2	≤0.2	0.53	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	0.69	≤0.2
3046	≤10	≤0.2	≤0.2	0.56	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	1.9	≤0.2
3047	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3048	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3049	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3050	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3052	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.62	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	10.8	≤0.2
3053	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3054	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	0.94	≤0.2
3055	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	0.42	≤0.2
3056	≤10	≤0.2	≤0.2	0.45	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	4.3	≤0.2
3058	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	0.65	≤0.2
3059	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
3060	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3061	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3062	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3063	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3064	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3065	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.87	≤0.2	nr	≤0.2	≤0.4	≤0.2	4.1	≤0.2	8.2	≤0.2
3066	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	3.1	≤0.2	6	≤0.2
3067	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.67	≤0.2	nr	≤0.2	≤0.4	≤0.2	3.6	≤0.2	6.5	≤0.2
3068	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.81	≤0.2	nr	≤0.2	≤0.4	≤0.2	4.2	≤0.2	8.1	≤0.2
3069	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	2.3	≤0.2	5.5	≤0.2
3070	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.67	≤0.2	nr	≤0.2	≤0.4	≤0.2	2.4	≤0.2	6.2	≤0.2
3071	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.63	≤0.2	nr	≤0.2	≤0.4	≤0.2	2.9	≤0.2	5.8	≤0.2
3072	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
Rb 65																					
Rb 66																					
Rb 69																					
Rb 70																					
Rb 77																					
Rb 78																					
Rb 83																					
Rb 84																					
Rb 87																					
Rb 88																					
Rb 91																					
Rb 92																					
Rb 96																					
5018	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
5012	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	0.78	≤0.2
5014	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
5013	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
5015	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	nr	≤0.2	≤0.2	≤0.2
5026	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
5021	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
5022	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
5023	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
5024	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.5	≤0.2	nr	≤0.2	≤0.4	≤0.2	5.6	≤0.2	6.8	≤0.2
5025	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	2.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	>10.0	≤0.2	≤0.2	≤0.2
3009	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3010	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	0.25	≤0.2	nr	≤0.2	≤0.4	≤0.2	1.3	≤0.2	≤0.2	≤0.2
3011	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
3012	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	9.2	≤0.2	≤0.2	≤0.2
3013	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	0.2	≤0.2	≤0.2	≤0.2
3014	≤10	≤0.2	≤0.2	≤0.2	≤0.4	≤0.1	≤0.1	≤0.1	≤0.1	≤0.4	≤0.3	≤0.2	≤0.2	nr	≤0.2	≤0.4	≤0.2	4.6	≤0.2	≤0.2	≤0.2

Units Det Limit Sample No.	Dichloromethane µg/λ ≤2	Ethybenzene(st) µg/λ ≤0.1	Ethylbenzene µg/λ ≤0.1	Iso-propylbenzene µg/λ ≤0.1	M-P-Xylene µg/λ ≤0.3	MTBE µg/λ ≤0.3	Naphthalene µg/λ ≤100	n-Butylbenzene µg/λ ≤0.2	n-Propylbenzene µg/λ ≤0.1	O-Xylene µg/λ ≤0.1	sec-Butylbenzene µg/λ ≤0.1	tert-Butylbenzene µg/λ ≤0.2	Tetrachloroethene µg/λ ≤0.1	Toluene µg/λ ≤4	trans-1,2-Dichloroe µg/λ ≤0.2	Trichloroethene µg/λ ≤0.1	Trichlorofluoromettr µg/λ ≤0.3	Vinyl Chloride µg/λ ≤0.2
3034	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3035	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.39	≤4	≤0.2	0.2	≤0.3	
3036	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.25	≤4	≤0.2	1.2	≤0.3	
3037	≤2	≤0.1	≤0.1	≤0.1	≤0.3	0.41	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.24	≤4	≤0.2	0.33	≤0.3	
3038	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.18	≤4	≤0.2	0.26	≤0.3	
3039	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.17	≤0.3	
3040	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.11	≤4	≤0.2	0.65	≤0.3	
3041	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3042	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3043	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	2.3	≤4	≤0.2	1.4	≤0.3	
3044	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	2.8	≤4	≤0.2	1.7	≤0.3	
3045	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3046	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.4	≤0.3	
3047	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3048	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3049	≤2	≤0.1	≤0.1	≤0.1	≤0.3	0.35	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.58	≤0.3	
3050	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3052	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.18	≤4	3	52	≤0.3	
3053	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3054	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.61	≤0.3	
3055	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3056	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.22	≤4	0.3	6.69	≤0.3	
3058	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.13	≤0.3	
3059	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.44	≤0.3	
3060	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.12	≤4	≤0.2	0.16	≤0.3	
3061	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.14	≤0.3	
3062	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	≤0.2
3063	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	≤0.2
3064	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	≤0.2
3065	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	0.29	62	≤0.3	0.8
3066	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	56	≤0.3	0.8
3067	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.16	≤4	≤0.2	61	≤0.3	0.8
3068	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	0.36	64	≤0.3	0.9
3069	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	55	≤0.3	0.9
3070	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	>10	≤0.3	1
3071	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	46	≤0.3	0.9
3072	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.21	≤4	≤0.2	23	≤0.3	≤0.2
Rb 65																		
Rb 66																		
Rb 69																		
Rb 70																		
Rb 77																		
Rb 78																		
Rb 83																		
Rb 84																		
Rb 87																		
Rb 88																		
Rb 91																		
Rb 92																		
Rb 96																		
5018	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5012	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5014	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.26	≤4	≤0.2	0.46	≤0.3	
5013	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.82	≤4	≤0.2	≤0.1	≤0.3	
5015	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5026	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.57	≤4	≤0.2	≤0.1	≤0.3	
5021	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5022	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5023	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	0
5024	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	0.37	28	≤0.3	0.7
5025	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3009	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3010	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3011	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	0.11	≤0.3	
3012	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3013	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.1	≤4	≤0.2	≤0.1	≤0.3	
3014	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
3026	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	0.33	≤0.2	0.58	≤0.3	
5019	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5020	nr	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
1857																		
1860																		
5001	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
5002	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	33	≤0.3	
5003	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	1.5	≤4	≤0.2	340	≤0.3	
5004	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	10.1	≤0.3	
5005	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	28	≤4	≤0.2	3.7	≤0.3	
5006	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	0.11	≤4	≤0.2	0.57	≤0.3	
5007	≤2	≤0.1	≤0.1	≤0.1	≤0.3	≤0.3	≤100	≤0.2	≤0.1	≤0.1	≤0.1	≤0.2	≤0.1	≤4	≤0.2	≤0.1	≤0.3	
50																		

Units Det Limit Sample No.	Type	Location	Profile	Distance down- stream m	Screen Depth m	Date Sampled	Time	pH	D.O. mg/l	Temperature °C	Conductivity µS/cm	Eh mV	Alkalinity as CaCO ₃ mg/l	F mg/l 0.1	Cl mg/l 0.1	NO ₃ mg/l 0.1	SO ₄ mg/l 0.1	PO ₄ mg/l 0.1	SI calcite	ppCO ₂
5010	AB					26/07/2001	12:30	7.10	10.00	16.1	731	499.41	132	<10	46.1	61.6	135.8	<10	-0.347	1.99
5011	AB					26/07/2001	15:15	7.08	10.00	14.2	975	437.77	180	<10	82.6	58.7	212.8	<10	-0.300	1.83
5016	AB					01/08/2001	10:10	7.38	8.00	12.6	356	467.12	97	<10	<10	<10	<10	<10	-0.777	2.40
5017	AB					01/08/2001	12:25	7.48	5.00	14.0	703	432.92	72	<10	10.7	<10	298.6	<10	-0.408	2.63
5031	AB					09/08/2001	09:52	7.06	5.00		876									
5032	AB					10/08/2001	10:40	6.70	3.00	17.2	770	444.72	180	<10	71.1	10.8	143.4	<10	-0.713	1.45
5033	AB					10/08/2001	11:46	7.23	7.00		699									
5034	AB					10/08/2001	14:15	7.55	7.00		599									
Sutton Park Samples																				
5027	GW	8 - Shallow Park House			524	09/08/2001	13:55	6.64	5	13.6	651	277.31	144	<10	21.5	<10	160.0	<10	-0.929	1.49
5028	GW	7 - Deep Park House			1114	09/08/2001	14:10	5.44	5	12.4	507	342.77	15	<10	38.9	51.9	135.5	<10	-3.225	1.27
5029	GW	11 - Rowton's Tube Well			300	09/08/2001	15:15	6.97	3.00	13.4	318	311.95	97	<10	17.2	11.8	20.9	<10	-1.308	1.99
5030	GW	9 - Hartopp			1872	09/08/2001	16:23	4.85	8.00	10.1	217	422.92	5	<10	24.4	11.6	47.9	<10	-4.892	1.16
3015	RB	S9			47	20/07/2001	12:15	6.54	2	18.8	228	231.1		0.2	19.8	7.4	57.9	1.8		
3016	RB	S10			68	20/07/2001	12:15	6.09	1.5	20.8	242	203.8		0.7	22.4	10.4	63.2	2.4		
3017	RB	S11			50	20/07/2001	14:53	7.5	3	15.5	260	388	206	0.2	15.8	13.5	24.2	2.0	-0.041	2.19
3019	RB	S12			46	20/07/2001	15:20	7.3	1.5	13.2	232	379	217	0.2	16.1	12.8	25.2	2.6	-0.209	1.97
3020	RB	S5			58	20/07/2001	16:52	6.33	3	18.3	422	381		0.4	68.4	34.3	99.8	2.0		
3021	RB	S6			57	20/07/2001	17:08	5.8	3	14.1	343	27	107	1.9	52.4	55.5	103.6	2.7	-2.152	0.78
3023	RB	S7			66	20/07/2001	18:14	6.8	3	12.7	257	329	129	0.3	13.0	17.6	49.4	2.3	-0.940	1.70
3025	RB	S8			73	20/07/2001	18:41	6.96	1.5	13.8	323	396.5	170	0.5	29.4	36.6	53.8	2.1	-0.473	1.74
3000	RB	S1			45	11/07/2001	13:04	5.48	4.5	14.9	132.4	499	0	0.8	12.9	13.9	49.6	2.6		
3001	RB	S2			58	11/07/2001	14:20	4.78	3.5	15.6	120.6	459		0.9	11.6	4.4	32.3	2.1		
3002	RB	S3			59	11/07/2001	15:13	7.49	9	16.5	238			0.1	10.1	6.5	13.9	1.9		
3004	RB	S4			57	11/07/2001	16:22	7.58	2.5		234			1.2	12.9	9.9	11.3	2.2		
3003	SW	BY S4				11/07/2001	18:06	6.97	8.5	11	190			0.1	15.3	8.3	39.4	2.0		
3018	SW	BYS11				20/07/2001	15:00	7.05	6	16.8	175	369.1	53	0.6	24.9	7.6	33.6	2.4	-1.415	2.33
3024	SW	BYS7				20/07/2001	18:22	7.4	6	12.2	235	318.8	107	1.4	35.3	29.5	57.3	2.5	-0.588	2.38
3022	Spring	WELL2				20/07/2001	17:43	7	6	12.8	248	410	143	2.0	14.4	35.9	41.3	2.3	-0.701	1.85
well1	Spring	by S3				11/07/2001	15:20	6.8		10	185			0.4	16.5	10.3	48.5	2.3		
Summer 2000 Results																				
1687	OUTFLOW			-9.565		26/07/2000	14:15	7.34		13	544		294	0.4	57.8	65.0	182.4	0.0	0.221	2.181
1690	OUTFLOW			-9.565		26/07/2000	16:20	8.29		16	473			1.0	65.3	58.1	143.7	0.0		3.2803
1693	OUTFLOW			-9.565		26/07/2000	17:20	7.66		14.8	416	418		0.5	49.8	13.4	93.7	0.0		2.685
1609	GW	P24		-9665		04/07/2000	12:00	7.3		13.6	1150	269	323	0.5	76.4	2.0	270.6	0.0	0.363	2.0005
1610	GW	P23		-9565		04/07/2000	13:15	6.25		12.5	1300	295	185	0.4	77.9	0.0	629.4	0.0	-0.810	0.8315
1612	GW	P20		-3490		04/07/2000	15:30	6.45		23.3	300	319.5		0.4	9.9	5.0	35.5	0.0		1.7307
1613	GW	P19		-3170		04/07/2000	16:13	7.74		15.4	780	316	211	0.6	35.4	31.0	89.2	0.0	0.400	2.6579
1614	GW	P17		0		05/07/2000	11:26	10.5		14	300	286	88	0.9	16.0	14.0	48.5	0.0	2.622	5.5767
1616	GW	P50		1390		05/07/2000	13:20	6.8		13	700	269.7	378	0.7	35.4	15.9	80.2	0.0	-0.222	1.653
1617	GW	BH41		1390		05/07/2000	15:03	7.69		14	480	283	134	2.7	33.9	3.6	100.3	0.0	-0.063	2.824
1619	GW	BH39		1570		05/07/2000	15:45	7.8		11	530	282	91	0.2	15.8	44.9	47.4	0.0	-0.070	2.8829
1620	GW	BH38		1770		05/07/2000	16:19	7.38		11	855	278	210	0.0	36.7	51.8	308.8	0.0	0.243	2.0933
1630	GW	P15		1990		12/07/2000	15:45	4.48		16.5	5200			0.0	1567.9	1.7	338.5	0.0	-1.707	-1.261
1631	GW	BH34		1890		12/07/2000	16:50	6.56		11	2800			0.0	735.9	2.4	259.3	0.0	0.258	0.8939
1632	GW	P7		7930		12/07/2000	17:50	8		15	470			0.7	22.7	19.6	118.8	0.0	0.568	2.9265
1679	GW	P8		4290		20/07/2000	11:41	7.13		13	650	338	270	0.3	33.2	56.3	95.5	0.0	-0.015	1.9804
1680	GW	P11		4170		20/07/2000	13:00	6.09		13	1100	408	109	47.1	37.9	137.0	418.9	0.0	-1.332	0.8033
1680	GW	P11		4170										45.7	38.4	142.1	434.7	0.0		
1681	GW	10P		4170		20/07/2000	14:31	6.9		16.5	1300	289	365	1.1	110.4	15.5	225.3	0.0	0.072	1.5443
1682	GW	13P		3990		20/07/2000	15:53	7.35		14	650	348	214	0.4	47.7	10.0	110.2	0.0	0.021	2.2635
1621	RB	RB6		1770	25	06/07/2000	12:00	7.34		17	900	275	168	0.7	114.2	20.4	124.4	3.9	-0.094	2.2532
1622	RB	RB3		1770	44	06/07/2000	12:51	7.44		20	1100	269.7	218	0.8	117.3	2.1	149.4	2.0	0.161	2.3117
1623	RB	RB4		1770	47	06/07/2000	13:26	7.38		20	1000	246.5	199	1.2	107.5	9.3	139.5	5.6	0.065	2.2478
1624	RB	RB5		1770	37	06/07/2000	14:00	6.98		19	1000	228.7</								

Units Det Limit Sample No.	Cs mg/l < 0.02	Cu mg/l < 0.02	Cd mg/l < 0.02	Cr mg/l < 0.02	K mg/l < 0.02	Mg mg/l < 0.02	Ni mg/l < 0.02	Zn mg/l < 0.03	Pb mg/l < 0.2	Si mg/l < 0.02	Mn mg/l < 0.02	Si mg/l < 0.02	Fe mg/l < 0.03	Ba mg/l < 0.02	Al mg/l < 0.3	Ni mg/l < 0.08	B mg/l < 0.02	TCM µg/l < 0.1	TCA µg/l < 0.1	CTC µg/l < 0.1	TCE µg/l < 0.1	PCE µg/l < 0.1
5010	118.70	< 0.03	< 0.02	1.53	4.26	10.69	22.85	< 0.03	< 0.2	0.15	< 0.02	5.39	< 0.02	0.07	< 0.3	< 0.08		0.8	1.2		9.1	< 0.1
5011	101.70	< 0.03	< 0.02	< 0.03	6.83	49.88	30.37	< 0.03	< 0.2	0.57	0.21	6.23	< 0.02	0.09	< 0.3	< 0.08		< 0.2	< 0.2		4.3	< 0.1
5016	31.55	< 0.03	< 0.02	< 0.03	1.68	16.1	7.144	< 0.03	< 0.2	0.11	< 0.02	5.56	0.04	0.63	< 0.3	< 0.08		nr	< 0.2		< 0.1	< 0.1
5017	78.93	< 0.03	< 0.02	< 0.03	1.95	24.6	31.33	< 0.03	< 0.2	2.93	0.03	6.78	0.08	0.03	< 0.03	< 0.08		nr	< 0.2		< 0.1	< 0.1
5031																						
5032	94.3	< 0.03	< 0.02	< 0.03	3.45	26.8	19.02	0.03	< 0.2	0.08	0.23	8.65	2.65	0.05	< 0.3	< 0.08		< 0.2	< 0.2		< 0.1	< 0.1
5033																						
5034																						
5027	82.13	< 0.03	< 0.02	< 0.03	18.4	5.41	28.25	< 0.03	< 0.2	0.16	0.64	6.98	11.02	0.31	< 0.03	< 0.08		< 0.2	< 0.2		< 0.1	< 0.1
5028	63.33	< 0.03	< 0.02	< 0.03	7.83	9.54	16.51	< 0.03	< 0.2	0.08	< 0.02	9.07	< 0.02	0.05	< 0.03	< 0.08						
5029	23.85	< 0.03	< 0.02	< 0.03	12.7	8.93	9.029	< 0.03	< 0.2	0.07	1.45	3.25	0.56	0.09	< 0.03	< 0.08						
5030	15.9	< 0.03	< 0.02	< 0.03	3.44	3.21	9.912	0.28	< 0.2	0.06	1.26	5.41	< 0.02	0.05	2.48	< 0.08						
3015	27.79	< 0.02	< 0.02	< 0.01	5.49	4.51	9.576	0.03	< 0.2	0.04	0.30	7.57	0.76	0.15	1.17	< 0.08						
3016	24.92	< 0.02	< 0.02	< 0.01	4.4	6.2	9.053	0.03	< 0.2	0.04	0.08	7.09	0.96	0.09	0.68	< 0.08						
3017	61.27	< 0.02	< 0.02	< 0.01	2.26	2.26	7.081	< 0.03	< 0.2	0.04	< 0.02	4.18	0.08	0.65	< 0.3	< 0.08						
3019	62.68	< 0.02	< 0.02	< 0.01	2.11	1.93	7.72	< 0.03	< 0.2	0.03	0.02	3.92	0.07	0.11	< 0.3	< 0.08						
3020	40.7	< 0.02	< 0.02	< 0.01	11.5	15	24.87	< 0.03	< 0.2	0.10	0.17	6.11	0.05	0.08	< 0.3	< 0.08						
3021	45.85	< 0.02	< 0.02	< 0.01	10.3	12.1	20.8	< 0.03	< 0.2	0.09	0.07	6.32	0.02	0.07	< 0.3	< 0.08						
3023	61.86	< 0.02	< 0.02	0.023	3.44	3.52	5.444	0.04	< 0.2	0.03	0.05	5.45	0.90	0.17	0.49	< 0.08						
3025	95.34	< 0.02	< 0.02	0.018	3.58	2.21	9.204	0.03	< 0.2	0.03	< 0.02	6.01	0.17	0.21	< 0.3	< 0.08						
3000	8.338	< 0.02	< 0.02	< 0.01	4.61	5.41	5.08	0.04	< 0.2	0.06	0.36	4.53	0.08	0.07	< 0.3	0.01						
3001	3.697	< 0.02	< 0.02	< 0.01	1.46	1.76	4.731	0.28	< 0.2	0.03	0.22	3.76	3.67	0.06	1.38	< 0.08						
3002	52.97	< 0.02	< 0.02	< 0.01	2.98	2.81	4.718	< 0.03	< 0.2	0.05	0.62	5.18	0.67	0.57	0.55	< 0.08						
3004	38.56	< 0.02	< 0.02	< 0.01	3.21	3.49	6.768	< 0.03	< 0.2	0.03	0.05	4.85	0.46	0.10	< 0.3	< 0.08						
3003	39.3	< 0.02	< 0.02	< 0.01	3.31	3.56	6.52	< 0.03	< 0.2	0.03	0.05	4.85	0.46	0.10	< 0.3	< 0.08						
3018	28.37	< 0.02	< 0.02	< 0.01	2.44	3.48	12.17	< 0.03	< 0.2	0.04	0.02	2.81	2.23	0.11	< 0.3	< 0.08						
3024	42.2	< 0.02	< 0.02	< 0.01	4.83	7.62	13	0.03	< 0.2	0.07	0.06	5.30	0.10	0.13	< 0.3	< 0.08						
3022	61.06	< 0.02	< 0.02	< 0.01	3.05	2.39	7.378	< 0.03	< 0.2	0.04	< 0.02	5.34	< 0.02	0.22	< 0.3	< 0.08						
well1	44.35	< 0.02	< 0.02	< 0.01	3.6	4.78	7.048	< 0.03	< 0.2	0.04	< 0.02	5.03	0.02	0.10	< 0.3	< 0.08						
1687	117.3	< 0.02	< 0.02	< 0.02	6.17	24.3	32.5	< 0.03	< 0.2	0.24	< 0.02	7.03	< 0.03	0.04	< 0.3	< 0.08						
1690	83.18	< 0.02	< 0.02	< 0.02	5.14	20.5	20.71	< 0.03	< 0.02	0.28	0.02	3.39	0.04	0.04	< 0.3	< 0.08						
1693	76.8	< 0.02	< 0.02	< 0.02	7.17	10.9	32.43	0.05	< 0.02	0.20	< 0.02	2.12	< 0.03	0.06	< 0.3	< 0.08						
1609	162.1	< 0.02	< 0.02	< 0.02	6.41	43.8	43.15	< 0.03	< 0.02	1.06	0.61	9.45	0.33	0.04	< 0.3	< 0.08						
1610	213.2	< 0.02	< 0.02	< 0.02	14.9	38.6	71.51	< 0.03	< 0.02	0.92	8.94	7.29	34.89	0.02	< 0.3	< 0.08						
1612	42.62	< 0.02	< 0.02	< 0.02	2.98	4.85	8.763	< 0.03	< 0.02	0.11	2.35	4.74	0.88	0.11	< 0.3	< 0.08						
1613	98.28	< 0.02	< 0.02	< 0.02	6.7	8.7	21.8	< 0.03	< 0.02	0.15	< 0.02	5.19	< 0.03	0.11	< 0.3	< 0.08						
1614	68.17	< 0.02	< 0.02	< 0.02	8.34	3.59	12.49	< 0.03	< 0.02	0.18	0.04	4.41	0.22	0.05	< 0.3	< 0.08						
1616	114.1	< 0.02	< 0.02	< 0.02	15.1	18.85	27.2	0.04	< 0.02	0.39	13.29	10.63	21.76	0.19	0.44	< 0.08						
1617	59.75	< 0.02	< 0.02	< 0.02	14.16	7.053	40.45	< 0.03	< 0.02	0.18	0.27	7.24	1.79	0.07	0.71	< 0.08						
1619	67.21	< 0.02	< 0.02	< 0.02	3.03	11.38	16.02	< 0.03	< 0.02	0.11	< 0.02	5.73	0.31	0.05	< 0.3	< 0.08						
1620	157.4	< 0.02	< 0.02	< 0.02	4.789	32.8	30.44	< 0.03	< 0.02	0.29	0.03	7.44	0.47	0.05	< 0.3	< 0.08						
1630	448	< 0.02	< 0.02	< 0.02	34.96	77.37	844.6	0.10	< 0.02	1.59	5.31	8.83	0.75	0.05	< 0.3	< 0.08						
1631	377.1	0.0272	< 0.02	< 0.02	20.6	35.97	374.6	0.05	< 0.02	1.28	4.17	7.53	0.78	< 0.02	< 0.3	< 0.08						
1632	96.34	0.0181	< 0.02	< 0.02	8.971	9.77	38	0.04	< 0.02	0.34	0.86	9.03	0.77	*	< 0.3	< 0.08						
1679	120.2	< 0.02	< 0.02	< 0.02	20.12	9.62	30.33	0.03	< 0.02	0.27	0.69	10.31	0.46	0.08	< 0.3	< 0.08						
1680	157.4	0.0287	< 0.02	< 0.02	12.72	40.59	55.45	0.45	< 0.02	0.39	15.05	30.26	0.46	0.11	16.30	< 0.08						
1680																						
1681	184.5	< 0.02	< 0.02	< 0.02	20.22	23.32	81.8	< 0.03	< 0.02	0.67	7.53	9.45	0.57	0.09	0.45	< 0.08						
1682	99.27	< 0.02	< 0.02	< 0.02	8.521	14.34	53.64	< 0.03	< 0.02	0.27	0.79	7.67	0.12	0.06	0.47	< 0.08						
1821	99.34	< 0.02	< 0.02	< 0.02	15.29	17.38	87.52	0.06	< 0.02	0.39	3.10	5.52	0.53	0.09	< 0.3	< 0.08						
1622	109.3	< 0.02	< 0.02	< 0.02	21.32	18.9	96.02	0.03	< 0.02	0.37	2.13	6.67	0.31	0.09	< 0.3	< 0.08						
1623	110.3	< 0.02	< 0.02	< 0.02	19.11	17.7	91.2	0.04	< 0.02	0.36	1.22	7.44	0.40	0.09	< 0.3	< 0.08						
1624	144.8	< 0.02	< 0.02	< 0.02	15.29	22.4	72.99	< 0.03	< 0.02	0.43	1.65	8.74	0.10	0.02	< 0.3	< 0.08						
1626	71.72	< 0.02	< 0.02	< 0.02	7.637	7.66	25.63	0.17	< 0.02	0.38	0.35	4.97	1.28	0.15	1.45	< 0.08						
1627	63.09	< 0.02	< 0.02	< 0.02	8.943	8.122	42.96	0.66	< 0.02	0.32	0.28	3.61	0.45	0.21	0.55	< 0.08						
1628	64.17	< 0.02	< 0.02	< 0.02	10.93	8.711	38.8	0.42	< 0.02	0.30	0.35	7.91	2.14	0.18	2.89	< 0.08						
1629	82.5	< 0.02	< 0.02	< 0.02	8.046	10.42	20.59	0.39	< 0.02	0.23	0.28	3.78	0.38	< 0.02	< 0.3	< 0.08						
1800	86.17	< 0.02	< 0.02	< 0.02	13.36	8.739	240.8	0.16	< 0.02	0.28	0.35	9.89	1.91	0.25	1.20	< 0.08						
1801	72.7	< 0.02	< 0.02	< 0.02	9.53	6.193	232.6	0.06	< 0.02	0.21	0.60	7.55	0.42	0.18	< 0.3	< 0.08						
1802	84.32	< 0.02	< 0.02	< 0.02	9.916	7.129	252.5	0.05	< 0.02	0.24	0.67	7.67	0.17	0.20	< 0.3	< 0.08						
1803	161																					

	Units Det Limit	lead as Pb	mercury as Hg	cadmium as Cd	chromium as Cr	arsenic as As	copper as Cu	zinc as Zn	nickel as Ni	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chlorobenzene	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
Sample No.	µg/L ≤0.4	µg/L ≤0.01	µg/L ≤0.1	µg/L ≤0.5	µg/L ≤1	µg/L ≤0.5	µg/L ≤10	µg/L ≤5	µg/L ≤0.2	µg/L ≤0.2	µg/L ≤0.2	µg/L ≤0.2	µg/L ≤0.2	µg/L ≤0.2	µg/L ≤0.3	µg/L ≤0.2	µg/L ≤10	µg/L ≤0.6	µg/L ≤0.2	µg/L ≤0.3	µg/L ≤1	µg/L nr
5010	0.5	0.07	0.1	1600.0	1	1.8	10	≤5.00	≤0.2	≤0.2	1.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr	
5011	≤0.400	≤0.0100	≤0.100	1.7	4	1.7	7	≤5.00	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr	
5016	≤0.400	0.17	≤0.100	1.1	5	2.5	5	≤5.00	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr	
5017	≤0.400	0.11	≤0.100	3.4	31	1.1	8	≤5.00	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	1.17	nr	
5031																						
5032	≤0.400	≤0.0100	≤0.100	1.2	≤1.00	4.2	34	74	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr	
5033																						
5034																						
5027	≤0.400	≤0.0100	≤0.100	≤0.500	2	2.0	14	≤5.00	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.3	≤0.2	≤10	≤0.6	≤0.2	≤0.3	≤1	nr	
5028																						
5029																						
5030																						
3015																						
3016																						
3017	1.6	0.02	≤0.1	≤0.5	≤1	1.4	≤10	≤5														
3019	0.8	0.02	≤0.1	≤0.5	≤1	0.6	≤10	≤5														
3020																						
3021	10.6	0.06	2.8	1.9	≤1	5.6	29	16														
3023	4.7	0.02	0.2	1.6	≤1	3.9	11	≤5														
3025	≤0.4	0.02	≤0.1	≤0.5	≤1	≤0.5	≤10	≤5														
3000	8.6	≤0.01	0.2	4.7	≤1	14.5	65	33														
3001	3.2	≤0.01	0.2	2.0	≤1	6.4	22	7														
3002	12.6	0.01	≤0.1	2.5	3	52.7	28	14														
3004	8.0	0.03	≤0.1	1.4	1	8.7	12	≤5														
3003	12.3	0.09	1.3	2.4	≤1	10.6	19	5														
3018	10.6	0.04	≤0.1	7.8	≤1	5.8	15	≤5														
3024	≤0.4	0.02	≤0.1	2.6	≤1	≤0.5	9	≤5														
3022	1.0	0.01	0.1	0.8	≤1	2.5	≤10	≤5														
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Units Det Limit Sample No.	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromo-dichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloro-dibromomethane	Chloroform	cis-1,3-Dichloropropene	cis-1,2-Dichloroethene	Dibromomethane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
5010	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	0.82	<0.2	5.8	<0.2
5011	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
5016	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	nr	<0.2	<0.2	<0.2
5017	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	nr	<0.2	<0.2	<0.2
5031																					
5032	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
5033																					
5034																					
5027	<10	<0.2	<0.2	<0.2	<0.4	<0.1	<0.1	<0.1	<0.1	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2
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Units Det Limit Sample No.	Type	Location	Profile	Distance down- stream m	Screen Depth m	Date Sampled	Time	pH	D.O. mg/l	Temperature °C	Conductivity µS/cm	Eh mV	Alkalinity as CaCO ₃ mg/l	F mg/l 0.1	Cl mg/l 0.1	NO ₃ mg/l 0.1	SO ₄ mg/l 0.1	PO ₄ mg/l 0.1	SI calcite	ppCO ₂
1833	RB	RB43		4170	30.5	24/08/2000	16:15	6.58	2.15	18.5	928	445	112	37.8	51.8	190.4	398.6	0.0	-0.778	1.2409
1834	RB	RB42		4170	37	24/08/2000	17:00	6.47	1.55	17.5	914	434	92	35.1	45.3	186.1	404.6	0.0	-0.972	1.1297
1835	RB	RB41		4170	22	24/08/2000	17:20	6.4	0.97	16.5	890	452	109	33.9	47.6	178.1	407.4	0.0	-0.980	1.0715
1836	RB	RB40		4170	92	24/08/2000	17:40	6.39	1.26	16.5	900	433	71	34.5	48.4	206.1	397.2	0.0	-1.161	1.046
1837	RB	RB31		4170	122.5	24/08/2000	18:05	6.41	1.32	16	912	444	91	36.2	50.2	217.3	386.1	0.0	-1.025	1.0584
1838	RB	RB36		3990	72	24/08/2000	19:05	7.17		17.5	737	402	370	1.7	62.0	18.7	131.5	0.0	0.233	1.929
1839	RB	RB37		3990	103	24/08/2000	19:25	6.97	1.23	16.5	881	426	337	0.5	59.2	19.3	119.6	0.0	-0.007	1.7287
1840	RB	RB38		3990	81.5	24/08/2000	19:50	7.15	1.22	17	731	297	242	1.4	99.9	5.0	159.6	1.9	0.026	1.9114
1841	RB	RB39		3990	90	24/08/2000	20:10	7.08	1.75	16.5	792	299	343	0.5	96.8	9.2	175.2	2.6	0.161	1.7881
1842	RB	RB32		4290	96.5	25/08/2000	10:50	7.43		15.5	542	422	142	0.3	41.3	59.6	100.1	0.0	-0.053	2.3186
1843	RB	RB33		4290	101	25/08/2000	11:15	7.16	3.1	16	727	384	136	0.2	92.6	111.3	143.8	0.0	-0.238	1.9455
1844	RB	RB34		4290	105	25/08/2000	11:50	7.34	3.45	18	844	426	252	0.7	121.1	80.6	147.6	0.0	0.288	2.047
1845	RB	RB35		4290	97	25/08/2000	12:10	7.34	1.58	17	826	420	135	1.2	134.0	186.4	162.9	0.3	0.070	1.9948
1846	RB	RB62		0	24	25/08/2000	13:40	6.97	2.5	18	792	402	402	0.2	36.8	12.2	189.4	0.0	0.198	1.6004
1847	RB	RB61		0	48	25/08/2000	14:00	6.99	2.35	18	805	427	391	0.3	35.3	14.0	206.8	0.0	0.220	1.6085
1848	RB	RB60		0	68	25/08/2000	14:20	6.98	1.8	18	801	438	398	0.2	35.0	16.4	206.0	0.0	0.218	1.5961
1849	RB	RB59		0	89	25/08/2000	14:50	7.17	3.15	19	815	434	324	0.3	35.3	11.7	188.8	0.0	0.305	1.7993
1850	RB	RB19		0	112	25/08/2000	15:25	7.55	3.75	22	845	239	383	0.2	37.9	19.5	178.7	0.0	0.742	2.1955
1851	RB	RB18		0	100	25/08/2000	15:55	7.62	4.8	22	831	364	334	0.0	37.4	5.4	161.7	0.0	0.735	2.2824
1852	RB	RB17		0	104	25/08/2000	16:30	7.7	4	21	346	400	58	0.3	22.0	10.3	55.7	0.0	-0.371	2.7884
	RB	RB58		1770																
1600	SW			-3990		02/06/2000	11:30							2.6	129.1	36.8	158.4	14.5		
1601	SW			1770		02/06/2000	12:35							0.1	125.9	35.7	151.9	13.5		
1602	SW			4170		02/06/2000	14:30							1.7	140.5	33.4	136.3	11.1		
1603	SW			12435		02/06/2000	15:30							2.9	100.2	28.3	127.4	5.3		
1606	SW			2950		02/06/2000	12:52							3.2	114.4	31.7	130.7	10.3		
1607	SW			6140		02/06/2000	15:10							1.1	121.2	34.9	142.0	11.7		
1608	SW			-9565		04/07/2000	11:21	7.52		18.7	960	255.7	168	0.6	79.7	18.8	150.7	5.4	0.065	2.4543
1611	SW			-3490		04/07/2000	14:49	7.52		25.3	987	318.3	198	1.2	99.5	29.0	143.8	13.3	0.113	2.4772
1615	SW			-9.565		05/07/2000	12:10	7.55		15	800	299	200	1.7	119.5	36.0	157.5	16.1	0.213	2.4425
1618	SW			1390		05/07/2000	15:22	7.77		16	500	254.5	232	0.9	116.2	32.8	164.1	12.8	0.513	2.6461
1625	SW			1770		06/07/2000	14:30	7.65		19	930	377	154	0.8	129.0	30.8	124.7	13.0	0.190	2.5517
1645	SW			-9565		20/07/2000	10:05	7.4		15	940	278.13	137	0.9	300.8	59.6	149.9	35.6	-0.072	2.2631
1646	SW			-8540		20/07/2000	11:20	7.51		15.4	938	281.12	226	0.8	197.8	36.8	208.3	12.8	0.307	2.3213
1647	SW			-7305		20/07/2000	12:15	7.63		16.4	1012	284.38	239	3.0	208.5	37.9	204.7	14.5	0.474	2.4184
1648	SW			-5900		20/07/2000	13:25	7.54		17.6	970	281.93	232	1.1	224.4	44.5	187.1	28.7	0.314	2.3859
1649	SW			-5080		20/07/2000	14:15	7.62		17.5	990	284.11	188	1.2	222.7	46.3	184.4	29.2	0.293	2.4749
1650	SW			-4175		20/07/2000	14:45	7.74		18	1015	287.37	199	1.2	228.0	45.8	186.8	27.8	0.427	2.6058
1651	SW			-3490		20/07/2000	15:15	7.9		19	1010	291.72	208	1.1	222.2	43.9	183.2	27.4	0.591	2.7814
1652	SW			-2450		20/07/2000	15:45	8.11		19	1050	297.43	206	1.7	224.6	46.0	184.0	28.5	0.798	2.9897
1653	SW			-1880		20/07/2000	16:20	8.11		18.8	1045	297.43	210	1.0	218.2	42.1	177.4	27.7	0.790	3.0066
1654	SW			-650		20/07/2000	17:25	8.13		19	1035	297.98	236	1.3	223.5	117.9	179.7	32.8	0.914	2.9725
1644	SW			-400		19/07/2000	18:00	8.05		17.8	796	295.8	213	1.4	153.4	42.5	170.2	25.5	0.747	2.9354
1643	SW			0		19/07/2000	17:25	8.12		17.5	834	297.71	244	1.0	147.8	41.5	169.3	26.0	0.881	3.0001
1642	SW			475		19/07/2000	16:50	8.2		18	818	299.88	236	1.0	142.3	40.8	169.6	23.6	0.953	3.0737
1641	SW			800		19/07/2000	16:25	8.34		17.8	778	303.89	231	1.0	139.9	39.3	170.3	23.6	1.091	3.207
1640	SW			1260		19/07/2000	15:10	8.29		18	829	302.33	234	1.3	144.1	41.4	170.0	23.6	1.053	3.1507
1639	SW			1570		19/07/2000	14:45	8.21		17.9	761	300.15	208	1.2	144.1	40.3	172.1	24.6	0.923	3.0688
1638	SW			1770		19/07/2000	14:05	8.1		17.3	823	297.16	186	1.1	146.9	45.2	177.1	22.9	0.775	2.9485
1637	SW			2310		19/07/2000	12:55	7.89		17	815	291.45	202	1.3	140.2	36.0	174.4	21.7	0.611	2.7288
1636	SW			2530		19/07/2000	12:20	7.88		16.8	795	291.18	239	1.5	142.2	38.4	177.2	22.4	0.659	2.7338
1635	SW			2630		19/07/2000	11:50	7.78		16.3	813	288.46	255	6.3	155.0	42.3	174.6	22.8	0.592	2.6281
1634	SW			2950		19/07/2000	10:45	7.63		16	796	284.38	308	5.2	164.3	44.3	168.3	24.6	0.515	2.488
1633	SW			3464		19/07/2000	10:05	7.72		16	815	286.83	295	2.4	161.0	48.9	168.9	24.9	0.596	2.5681
1664	SW			3709		19/07/2000	10:10	7.78		15	1200	295	212	1.0	173.1	45.8	170.3	24.6	0.491	2.6489
1665	SW			4220		19/07/2000	10:47	7.9		16	1200	297	158	1.0	170.0	43.7	169.5	24.2	0.480	2.7729
1666	SW			4880		19/07/2000	11:27	8.24		16.5	1200	287	221	2.4	161.2	43.3	170.0	333.8	0.945	3.1333
1667	SW			5300		19/07/2000	11:52	8.26		16	1200	290	189	1.1	159.5	42.2	166.4	21.9	0.933	3.1172
1668	SW			5910		19/07/2000	12:51	8.28		17	1200	297	257	1.7	163.0	43.0	176.3	21.4	1.075	3.1489
1669	SW			6140		19/07/2000	13:28	8.3		17	1200	291	239	1.0	166.0	43.7	172.2	23.9	1.051	3.1809
1670	SW			6680		19/07/2000	13:52	8.33		16.5	1200	313	194	1.1	173.0	45.7	173.9	22.4	1.026	3.1762
1671	SW			7374		19/07/2000	14:39	8.35		17	1150	300	288	1.2	179.5	43.5	179.4	23.6	1.202	3.2115
1672	SW			7834		19/07/2000	15:01	8.37		17	1200	301	230	1.6	182.8	45.2	177.5	22.8	1.120	3.2354
1673	SW			7930		19/07/2000	15:42	8.42		17	1150	336	191	1.1	161.1	45.0	171.8	22.3	1.105	3.27
1674	SW			8220		19/07/2000	16:12	8.51		17	1150	330	206	1.8	157.2	42.6	171.9	21.9	1.205	3.3829
1675	SW			9776		19/07/2000	16:49	8.55		17.5	1100	317	148	0.9	147.9	36.8	168.9	16.8	1.090	3.4346
1676	SW			11976		19/07/2000	17:24	8.59		17	1050	309	195	0.9	136.4	37.5	169.1	15.6	1.249	3.4746
1677	SW			15276		19/07/2000	18:06	8.71		18	1000	305	189	0.9	114.7	33.4	165.6	13.3	1.348	3.6029
1678	SW			15435		19/07/2000														

Units	Cs	Cu	Cd	Cr	K	Mg	Na	Zn	Pb	Sr	Mn	Si	Fe	Ba	Al	Ni	B	TCM	TCA	CTC	TCE	PCE
Det Limit	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Sample No.	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.03	< 0.2	< 0.02	< 0.02	< 0.02	< 0.03	< 0.02	< 0.3	< 0.08	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1833	177.6	0.0304	< 0.02	< 0.02	12.36	35.6	57.77	0.14	< 0.02	0.53	4.73	26.06	0.27	0.12	11.21	< 0.08						
1834	178.1	0.025	< 0.02	< 0.02	11.96	35.52	54.04	0.15	< 0.02	0.52	4.27	25.05	0.84	0.13	8.84	< 0.08						
1835	173.3	0.0251	< 0.02	< 0.02	12.35	34.4	54.77	0.13	< 0.02	0.51	5.08	22.83	0.80	0.10	8.30	< 0.08						
1836	178.6	< 0.02	< 0.02	< 0.02	11.56	34.09	54.73	0.19	< 0.02	0.51	4.73	23.07	0.58	0.11	8.58	< 0.08						
1837	182.8	0.026	< 0.02	< 0.02	11.37	32.43	54.67	0.16	< 0.02	0.51	4.21	23.15	0.76	0.11	8.36	< 0.08						
1838	141.7	< 0.02	< 0.02	< 0.02	7.724	20.18	61.53	< 0.03	< 0.02	0.41	1.97	9.43	0.75	0.12	< 0.3	< 0.08						
1839	141.8	< 0.02	< 0.02	< 0.02	11.29	20.11	64.99	0.03	< 0.02	0.40	1.61	9.08	0.74	0.08	< 0.3	< 0.08						
1840	140.9	< 0.02	< 0.02	< 0.02	11.41	20.34	62.22	0.05	< 0.02	0.39	4.15	7.49	4.90	0.12	< 0.3	< 0.08						
1841	159.3	< 0.02	< 0.02	< 0.02	15.43	25.17	74.28	0.05	< 0.02	0.49	0.97	6.10	0.42	0.08	< 0.3	< 0.08						
1842	104.9	< 0.02	< 0.02	< 0.02	21.64	14.23	34.2	< 0.03	< 0.02	0.23	0.11	6.85	0.88	0.11	0.38	< 0.08						
1843	133.3	0.0986	< 0.02	< 0.02	21.7	15.69	75.7	0.14	< 0.02	0.33	0.28	12.37	4.73	0.17	1.95	< 0.08						
1844	159.7	0.0457	< 0.02	< 0.02	15.61	20.4	64.63	0.10	< 0.02	0.53	2.40	9.20	1.30	0.12	0.80	< 0.08						
1845	180.1	0.0383	< 0.02	< 0.02	14.38	23.19	40.62	0.07	< 0.02	0.53	2.49	11.08	4.42	0.19	1.83	< 0.08						
1846	190.5	0.0276	< 0.02	< 0.02	20.46	17.19	41.66	0.16	< 0.02	0.58	2.48	10.70	6.11	0.22	2.47	< 0.08						
1847	196.7	< 0.02	< 0.02	< 0.02	20.18	17.32	40.37	< 0.03	< 0.02	0.56	0.96	8.30	0.69	0.07	0.87	< 0.08						
1848	196.9	< 0.02	< 0.02	< 0.02	17.6	17.35	40.8	0.04	< 0.02	0.60	0.70	10.15	1.43	0.09	1.95	< 0.08						
1849	191	< 0.02	< 0.02	< 0.02	22.37	16.56	41.13	0.03	< 0.02	0.59	0.61	9.85	1.21	0.10	1.62	< 0.08						
1850	184	< 0.02	< 0.02	< 0.02	17.97	17.19	42.06	< 0.03	< 0.02	0.59	4.44	8.60	0.60	0.11	< 0.3	< 0.08						
1851	177	< 0.02	< 0.02	< 0.02	17.79	15.88	48.28	< 0.03	< 0.02	0.54	0.48	7.69	0.43	0.10	0.56	< 0.08						
1852	66.36	< 0.02	< 0.02	< 0.02	4.69	7.05	9.217	0.03	< 0.02	0.16	2.33	5.45	0.27	0.09	< 0.3	< 0.08						
	94.16	< 0.02	< 0.02	< 0.02	19.79	18.46	98.82	< 0.03	< 0.02	0.45	10.74	8.87	0.05	0.06	< 0.3	< 0.08						
1600	108.6	< 0.02	< 0.02	< 0.01	17.27	24.02	94.02	0.09	< 0.2	0.46	0.28	5.24	0.27	0.05	< 0.3	< 0.08						
1601	106.5	< 0.02	< 0.02	< 0.02	16.77	22.15	89.42	0.06	< 0.02	0.44	0.18	4.90	0.25	0.04	< 0.3	< 0.08						
1602	104.3	< 0.02	< 0.02	< 0.02	15.09	20.58	93.04	0.06	< 0.02	0.41	0.14	4.70	0.21	0.04	< 0.3	< 0.08						
1603	96.08	< 0.02	< 0.02	< 0.02	12.43	19.12	69.06	0.07	< 0.02	0.35	0.09	4.37	0.24	0.05	< 0.3	< 0.08						
1606	105.8	< 0.02	< 0.02	< 0.02	15.61	21.02	87.2	0.06	< 0.02	0.43	0.17	4.86	0.29	0.05	< 0.3	< 0.08						
1607	103.7	< 0.02	< 0.02	< 0.02	15.91	20.96	79.26	0.06	< 0.02	0.40	0.15	4.68	0.28	0.05	< 0.3	< 0.08						
1608	94.62	< 0.02	< 0.02	< 0.02	12.82	23.11	68.97	0.09	< 0.2	0.48	0.45	5.41	0.05	0.04	< 0.3	0.09						
1611	89.77	< 0.02	< 0.02	< 0.02	14.98	19.87	85.42	0.06	< 0.02	0.40	0.23	5.60	0.15	0.03	< 0.3	< 0.08						
1615	104.2	< 0.02	< 0.02	< 0.02	18.93	22.77	100.1	0.04	< 0.02	0.44	0.25	6.36	0.10	0.03	< 0.3	< 0.08						
1618	108.2	< 0.02	< 0.02	< 0.02	20.12	24.13	103.1	0.04	< 0.02	0.47	0.23	6.39	0.10	0.03	< 0.3	< 0.08						
1625	102	< 0.02	< 0.02	< 0.02	15.47	18.48	82.11	0.09	< 0.02	0.39	0.29	5.54	0.16	< 0.02	< 0.3	< 0.08						
1645	111.5	0.0419	< 0.02	< 0.02	24.14	18.61	176.2	0.20	< 0.02	0.28	0.22	3.12	0.15	*	< 0.3	0.12						
1646	125.6	0.0339	< 0.02	< 0.02	18.82	28.83	129.9	0.09	< 0.02	0.47	0.26	4.76	0.06	*	< 0.3	0.11						
1647	132.4	< 0.02	< 0.02	< 0.02	20.35	30.47	145.4	0.08	< 0.02	0.53	0.21	4.71	0.06	*	< 0.3	0.09						
1648	116	< 0.02	< 0.02	< 0.02	22.53	26.22	174.7	0.07	< 0.02	0.44	0.12	5.31	0.06	*	< 0.3	< 0.08						
1649	113.6	0.0192	< 0.02	< 0.02	24.75	25.25	168.9	0.07	< 0.02	0.43	0.12	5.29	0.13	0.05	< 0.3	< 0.08						
1650	110.8	0.021	< 0.02	< 0.02	22.66	24.95	171.2	0.06	< 0.02	0.42	0.11	5.15	0.07	0.04	< 0.3	< 0.08						
1651	106.9	< 0.02	< 0.02	< 0.02	23.2	24.52	167.8	0.06	< 0.02	0.42	0.09	4.97	0.05	0.04	< 0.3	< 0.08						
1652	107.3	< 0.02	< 0.02	< 0.02	22	24.68	169.6	0.05	< 0.02	0.41	0.09	4.84	0.04	0.06	< 0.3	< 0.08						
1653	103.2	< 0.02	< 0.02	< 0.02	24.15	23.14	166.3	0.06	< 0.02	0.40	0.08	4.65	0.05	0.09	< 0.3	< 0.08						
1654	116.9	< 0.02	< 0.02	< 0.02	24.74	25.6	190.2	0.05	< 0.02	0.45	0.08	5.07	0.05	0.07	< 0.3	< 0.08						
1644	105.9	0.0316	< 0.02	< 0.02	17.8	23.68	107.3	0.04	< 0.02	0.37	0.07	4.97	0.04	*	< 0.3	< 0.08						
1643	107.2	0.0365	< 0.02	< 0.02	17.21	24.91	104.9	0.04	< 0.02	0.38	0.07	5.01	*	*	< 0.3	0.08						
1642	108.8	0.0349	< 0.02	< 0.02	17.22	25.17	106	0.04	< 0.02	0.39	0.06	4.87	< 0.03	*	< 0.3	< 0.08						
1641	110.5	0.0322	< 0.02	< 0.02	16.4	25.57	101.4	0.05	< 0.02	0.40	0.06	4.88	0.03	*	< 0.3	0.08						
1640	112.1	0.0274	< 0.02	< 0.02	16.46	26.47	103.4	0.04	< 0.02	0.40	0.07	5.16	0.05	*	< 0.3	0.08						
1639	112.6	0.0299	< 0.02	< 0.02	17.84	26.52	105.9	0.06	< 0.02	0.45	0.09	5.33	0.05	*	< 0.3	0.09						
1638	115.3	0.0242	< 0.02	< 0.02	19.13	26.9	108.4	0.04	< 0.02	0.46	0.07	5.42	0.03	*	< 0.3	0.09						
1637	117.9	0.0196	< 0.02	< 0.02	18.99	28.8	106.7	0.05	< 0.02	0.48	0.16	5.34	0.06	*	< 0.3	0.09						
1636	113.9	0.0288	< 0.02	< 0.02	18.39	27.09	108.8	0.05	< 0.02	0.46	0.08	5.53	0.04	*	< 0.3	< 0.08						
1635	115.4	0.0305	< 0.02	< 0.02	19.65	26.43	117.9	0.06	< 0.02	0.48	0.11	5.63	0.05	*	< 0.3	0.08						
1634	112.8	0.0273	< 0.02	< 0.02	21.22	25.61	127	0.06	< 0.02	0.47	0.11	5.60	0.07	*	< 0.3	< 0.08						
1633	115.4	0.0275	< 0.02	< 0.02	21.84	26.94	129.9	0.06	< 0.02	0.47	0.12	5.64	0.12	*	< 0.3	< 0.08						
1664	110	< 0.02	< 0.02	< 0.02	19.82	25.8	130.7	0.04	< 0.2	0.48	0.10	5.83	0.07	0.05	< 0.3	< 0.08						
1665	109	< 0.02	< 0.02	< 0.02	19.65	25.46	127.5	0.04	< 0.02	0.48	0.08	5.61	0.04	0.04	< 0.3	< 0.08						
1666	104	< 0.02	< 0.02	< 0.02	19.09	24.93	124.4	0.03	< 0.02	0.46	0.07	5.57	0.03	0.03	< 0.3	< 0.08						
1667	113	< 0.02	< 0.02	< 0.02	19.61	26.66	129.2	0.04	< 0.02	0.47	0.06	5.70	0.03	0.03	< 0.3	< 0.08						
1668	110	< 0.02	< 0.02	< 0.02	18.75	25.82	124.1	0.05	< 0.02	0.46	0.06	5.71	0.03	0.04	< 0.3	< 0.08						
1669																						

Sample No.	Units Det Limit	
1833	µg/L	1,3,5-Trimethylben.
1834	<10	
1835		
1836		
1837		
1838		
1839		
1840		
1841		
1842		
1843		
1844		
1845		
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1688		
1689		
1691		
1694		
1666		

µg/L	1,3,5-Trimethylben.
<0.2	
µg/L	1,3-Dichlorobenzer
<0.2	
µg/L	1,3-Dichloropropan
<0.2	
µg/L	1,4-Dichlorobenzer
<0.4	
µg/L	2,2-Dichloropropan
<0.1	
µg/L	2-Chlorotoluene
<0.1	
µg/L	4-Chlorotoluene
<0.1	
µg/L	4-Isopropyltoluene
<0.1	
µg/L	Benzene
<0.1	
µg/L	Bromobenzene
<0.4	
µg/L	Bromochlorometha
<0.3	
µg/L	Bromo-dichloromet
<0.2	
µg/L	Bromoform
<0.2	
µg/L	Bromomethane
nr	
µg/L	Carbontetrachloride
<0.2	
µg/L	Chlorobenzene
<0.4	
µg/L	Chloro-dibromomet
<0.2	
µg/L	Chloroform
<0.2	
µg/L	cis1,3-Dichloroprof
<0.2	
µg/L	cis-1,2-Dichloroeth
<0.2	
µg/L	Dibromomethane
<0.2	

Units Det Limit Sample No.	Dichloromethane Δ μg/l	Ethylenbenzene(st Δ0.1 μg/l	Ethylbenzene Δ0.1 μg/l	Iso-propylbenzene Δ0.1 μg/l	M-P-Xylene Δ0.3 μg/l	MTBE Δ0.3 μg/l	Naphthalene Δ100 μg/l	n-Butylbenzene Δ0.2 μg/l	n-Propylbenzene Δ0.1 μg/l	O-Xylene Δ0.1 μg/l	sec-Butylbenzene Δ0.1 μg/l	tert-Butylbenzene Δ0.2 μg/l	Tetrachloroethene Δ0.1 μg/l	Toluene Δ4 μg/l	trans-1,2-Dichloroe Δ0.2 μg/l	Trichloroethene Δ0.1 μg/l	Trichlorofluoromettr Δ0.3 μg/l	Vinyl Chloride Δ0.2 μg/l
1833																		
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Units Det Limit Sample No.	Type	Location	Profile	Distance down-stream		Date Sampled	pH	D. O. mg/l	Temperature °C	Conductivity µS/cm	Eh mV	F mg/l 0.1	Cl mg/l 0.1	NO ₃ mg/l 0.1	SO ₄ mg/l 0.1	Ca mg/l < 0.02	Cu mg/l < 0.02	Cd mg/l < 0.02	Cr mg/l < 0.02	K mg/l <0.02
				≡	≡															
3080	RB	RB44	8	4170	18	26/11/2001	6.22	8	12	670	383	40.5	47.2	129.8	369.0	149.9	0.036	< 0.02	< 0.02	10.9
3081	RB	RB40	8	4170	92	26/11/2001	6.16	5	11.6	709	410	36.6	42.6	131.1	379.0	148.2	< 0.02	< 0.02	< 0.02	11.2
3082	RB	RB43	8	4170	31	26/11/2001	5.8	5	11.6	698	419	34.9	46.2	128.4	379.0	147.6	0.015	< 0.02	< 0.02	11.5
3083	RB	RB41	8	4170	22	26/11/2001	5.92	5	11.3	688	420	33.2	42.0	123.6	375.0	143.9	< 0.02	< 0.02	< 0.02	11.5
3084	RB	RB42	8	4170	37	26/11/2001	6.24	5	6.9	615	441	33.0	43.4	120.0	365.0	138.2	< 0.02	< 0.02	< 0.02	11.8
3085	RB	RB31	8	4170	123	26/11/2001	6.2	5	7.7	627	430	30.9	41.9	135.5	387.0	144.6	< 0.02	< 0.02	< 0.02	12.7
3086	RB	RB30	8	4170	125	26/11/2001	6.96	4.5	6.9	488	401	10.1	54.2	39.5	138.0	123.6	< 0.02	< 0.02	< 0.02	12
3087	RB	RB29	8	4170	119	26/11/2001	6.99	4.5	5.2	679	389	0.7	161.0	37.2	242.0	188.4	< 0.02	< 0.02	< 0.02	15.7
3088	RB	RB45	8	4170	96	26/11/2001	7.11	4	5.1	647	389.9	0.5	163.0	37.8	237.0	190.4	< 0.02	< 0.02	< 0.02	15.2
3089	RB	RB46	8	4170	70	26/11/2001	7.16	4	4.7	681	392	0.8	169.0	38.7	224.0	198.2	< 0.02	< 0.02	< 0.02	16.1
3090	RB	RB28	8	4170	121	27/11/2001	6.75	3.5	7.8	797	440	0.4	171.0	50.0	273.0	215.2	< 0.02	< 0.02	< 0.02	19.5
3091	RB	RB27	8	4170	129	27/11/2001	6.89	3.5	8.7	837	408	0.5	193.0	50.0	285.0	226.3	< 0.02	< 0.02	< 0.02	18.2
3092	RB	RB49	8	4170	99	27/11/2001	6.93	3.5	7.8	758	296.4	0.4	194.0	48.3	292.0	218.5	< 0.02	< 0.02	< 0.02	16.3
3093	RB	RB50	8	4170	72	27/11/2001	6.93	7	8.9	771	328	0.4	217.0	44.7	235.0	212.6	< 0.02	< 0.02	< 0.02	17
3094	RB	RB51	8	4170	45	27/11/2001	7.07	5.5	8.1	747	343.5	0.4	216.0	38.1	223.0	205.7	< 0.02	< 0.02	< 0.02	16.1
3095	RB	RB52	8	4170	23	27/11/2001	7.01	4.5	8.7	753	354	0.4	217.0	42.9	221.0	201.8	< 0.02	< 0.02	< 0.02	16
3096	RB	RB48	8	4170	19	27/11/2001	6.84	4.5	9.7	810	373	0.4	178.0	43.3	235.0	192.9	< 0.02	< 0.02	< 0.02	13.6
3097	RB	RB47	8	4170	47	27/11/2001	7	4.5	10.5	818	373.6	0.5	178.0	43.8	236.0	193.2	< 0.02	< 0.02	< 0.02	18.4
3098	RB	RB44	8	4170	18	27/11/2001	6.47	4.5	9.6	663	410	39.0	44.5	127.5	388.0	146.9	0.023	< 0.02	< 0.02	15.5
3099	GW	P11	8	4170		27/11/2001	6.32	3	10.4	776	433.5	28.1	44.3	181.6	451.0	182.3	0.058	< 0.02	< 0.02	16.7
3100	GW	P10	8	4170		27/11/2001	6.77	5	10.4	872	323	0.4	208.0	54.5	280.0	216.8	< 0.02	< 0.02	< 0.02	27.5

	Mg	Na	Zn	Pb	Sr	Mn	Si	Fe	Ba	Al	Ni	lead as Pb	mercury as Hg	cadmium as Cd	chromium as Cr	arsenic as As	copper as Cu	zinc as Zn	nickel as Ni	1, 1, 1, 2-Tetrachloroethane	1, 1, 1-Trichloroethane
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
	<0.02	<0.02	<0.03	<0.2	<0.02	<0.02	<0.02	<0.03	<0.02	<0.3	<0.08	<0.4	<0.01	<0.1	<0.5	<1	<0.5	<10	<5	<0.2	<0.2
3080	31.3	50.66	0.20	<0.02	0.41	5.89	27.00	0.04	0.08	14.10	<0.08	0.6	<0.01	1.3	<0.5	<1	43.4	206	75	0.2	<0.2
3081	32	51.36	0.15	<0.02	0.42	5.62	26.68	0.03	0.17	12.21	<0.08	0.4	<0.01	1.2	<0.5	<1	21.4	151	66	0.2	<0.2
3082	31.8	57.77	0.15	<0.02	0.43	5.52	27.07	0.02	0.48	13.51	<0.08	<0.4	<0.01	1.2	<0.5	<1	24.6	143	63	0.2	<0.2
3083	31.2	52.99	0.14	<0.02	0.43	5.57	26.87	0.02	0.10	12.71	<0.08	<0.4	<0.01	1.2	<0.5	<1	19.6	142	62	0.2	<0.2
3084	30.4	58.27	0.14	<0.02	0.43	5.40	26.85	0.02	0.07	13.22	<0.08	1.2	<0.01	1.1	<0.5	<1	16.9	136	60	0.2	<0.2
3085	33.7	56.39	0.14	<0.02	0.45	6.00	28.57	0.02	0.20	13.02	<0.08	<0.4	<0.01	1.1	<0.5	<1	23.1	131	68	0.2	<0.2
3086	19.8	64.06	0.05	<0.02	0.37	0.68	8.77	<0.02	0.05	0.80	<0.08	<0.4	<0.01	0.4	<0.5	<1	6.5	39	10	0.2	<0.2
3087	23.4	92.81	0.05	<0.02	0.72	3.40	7.79	<0.02	0.12	<0.3	<0.08	<0.4	<0.01	0.4	<0.5	<1	3.5	36	8	0.2	<0.2
3088	23.6	93.28	0.04	<0.02	0.73	3.00	8.00	<0.02	0.08	<0.3	<0.08	<0.4	<0.01	0.4	<0.5	<1	5.5	34	8	0.2	<0.2
3089	23.2	99.41	0.04	<0.02	0.71	2.15	8.02	<0.02	0.26	<0.3	<0.08	<0.4	<0.01	0.3	<0.5	<1	4.6	34	11	0.2	<0.2
3090	25.6	110	0.12	<0.02	0.84	3.07	7.72	<0.02	0.08	<0.3	<0.08	<0.4	<0.01	1.2	<0.5	<1	3.9	108	24	0.2	<0.2
3091	24.4	86.59	0.21	<0.02	0.84	3.08	7.31	0.04	0.08	<0.3	<0.08	0.5	<0.01	1.0	0.7	<1	7.1	202	21	0.2	<0.2
3092	23.9	82.94	0.13	<0.02	0.82	3.30	7.05	0.02	0.08	<0.3	<0.08	<0.4	<0.01	0.9	<0.5	<1	5.2	130	19	0.2	<0.2
3093	23.3	86.27	0.08	<0.02	0.79	2.78	7.25	<0.02	0.07	<0.3	<0.08	<0.4	<0.01	0.6	<0.5	<1	4.8	69	12	0.2	<0.2
3094	22	90.76	0.05	<0.02	0.78	2.46	7.21	<0.02	0.27	<0.3	<0.08	<0.4	<0.01	0.4	<0.5	<1	4.7	50	8	0.2	<0.2
3095	22.1	85.82	0.06	<0.02	0.76	2.58	7.06	<0.02	0.07	<0.3	<0.08	<0.4	<0.01	0.5	<0.5	<1	9.4	58	10	0.2	<0.2
3096	20.4	78	0.03	<0.02	0.69	0.72	7.23	<0.02	0.07	<0.3	<0.08	<0.4	<0.01	0.2	<0.5	<1	7.6	31	8	0.2	<0.2
3097	21.1	87.26	0.02	<0.02	0.71	0.68	7.55	<0.02	0.08	<0.3	<0.08	<0.4	<0.01	0.3	<0.5	<1	6.5	27	7	0.2	<0.2
3098	31.9	65.87	0.16	<0.02	0.43	5.65	28.31	<0.02	0.07	16.67	<0.08	0.6	<0.01	1.2	<0.5	<1	36.7	166	70	0.2	<0.2
3099	42	73.67	0.43	<0.02	0.44	10.74	29.86	0.02	0.82	10.66	0.13	<0.4	<0.01	4.0	1.3	<1	70.3	451	149	0.2	<0.2
3100	27.1	99.07	0.02	<0.02	0.82	2.86	7.52	0.03	0.07	<0.3	<0.08	<0.4	<0.01	<0.1	<0.5	<1	3.0	32	10	0.2	<0.2

	1, 1, 2-Trichloroethane	1, 1-Dichloroethane	1, 1-Dichloroethene	1, 2, 3-Trichloropropane	1, 2, 4-Trimethylbenzene	1, 2-Dibromo-3-Chloropropane	1, 2-Dibromoethane	1, 2-Dichlorobenzene	1, 2-Dichloroethane	1, 2-Dichloropropane	1, 3, 5-Trimethylbenzene	1, 3-Dichlorobenzene	1, 3-Dichloropropane	1, 4-Dichlorobenzene	2, 2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene
	µg/l <0.2	µg/l <0.2	µg/l <0.2	µg/l <0.3	µg/l <0.2	µg/l <10	µg/l <0.6	µg/l <0.2	µg/l <0.3	µg/l <1	µg/l nr	µg/l <10	µg/l <0.2	µg/l <0.2	µg/l <0.2	µg/l <0.4	µg/l <0.1	µg/l <0.1	µg/l <0.1	µg/l <0.1
3080	19.1	0.2	3.62	0.822	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3081	22.2	0.2	3.33	0.735	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3082	16.8	0.2	3.39	0.815	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3083	23.2	0.2	5.3	1.2	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3084	18.7	0.2	3.78	0.883	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3085	23	0.2	4.99	1.2	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3086	0.781	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3087	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3088	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3089	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3090	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3091	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3092	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3093	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3094	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3095	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3096	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3097	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3098	23.7	0.2	4.83	1.05	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3099	22	0.2	3.97	1.08	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.1
3100	0.2	0.2	0.2	0.3	<0.2	<10	<0.6	<0.2	0.3	1		<10	<0.2	<0.2	0.2	<0.4	<0.1	<0.1	<0.1	0.154

	Bromochloromethane	Bromo-dichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloro-dibromomethane	Chloroform	cis-1,3-Dichloropropene	cis-1,2-Dichloroethene	Dibromomethane	Dichloromethane	Ethylbenzene(styrene)	Ethylbenzene	Iso-propylbenzene	M-P-Xylene	MTBE	Napthalene	n-Butylbenzene	n-Propylbenzene	O-Xylene
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
	<0.4	<0.3	<0.2	<0.2	nr	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.1	<0.1	<0.1	<0.3	<0.3	<100	<0.2	<0.1
3080	<0.4	<0.3	0.497	<0.2		0.2	4	<0.2	2.42	<0.2	5.27	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3081	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	2.25	<0.2	4.87	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3082	<0.4	<0.3	0.541	<0.2		0.2	4	<0.2	2.37	<0.2	5.03	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3083	<0.4	<0.3	0.714	<0.2		0.2	4	<0.2	3.44	<0.2	7.54	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3084	<0.4	<0.3	0.508	<0.2		0.2	4	<0.2	2.58	<0.2	5.67	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3085	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	3.43	<0.2	7.12	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3086	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3087	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3088	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3089	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3090	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3091	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3092	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3093	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3094	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3095	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3096	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3097	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3098	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	3.26	<0.2	7.33	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3099	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	5.01	<0.2	7.06	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1
3100	<0.4	<0.3	0.2	<0.2		0.2	4	<0.2	0.2	<0.2	0.2	<0.2	2	<0.1	<0.1	<0.1	<0.3	0.3	<100	<0.2	<0.1

	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride
	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
	<0.1	<0.1	<0.2	<0.1	<4	<0.2	<0.1	<0.3
3080	<0.1	<0.1	<0.2	0.1	0.2	0.2	28.7	0.41
3081	<0.1	<0.1	<0.2	0.101	0.2	0.2	36.6	0.33
3082	<0.1	<0.1	<0.2	0.114	0.2	0.2	28.7	0.33
3083	<0.1	<0.1	<0.2	0.112	0.2	0.225	39	0.32
3084	<0.1	<0.1	<0.2	0.1	0.2	0.2	29	0.39
3085	<0.1	<0.1	<0.2	0.148	0.2	0.225	38.8	0.37
3086	<0.1	<0.1	<0.2	0.14	0.2	0.2	7.21	<0.3
3087	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.283	<0.3
3088	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3089	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.127	<0.3
3090	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3091	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3092	<0.1	<0.1	<0.2	0.1	0.519	0.2	0.1	<0.3
3093	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3094	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3095	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3096	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3097	<0.1	<0.1	<0.2	0.1	0.2	0.2	0.1	<0.3
3098	<0.1	<0.1	<0.2	0.124	0.2	0.261	38.3	0.39
3099	<0.1	<0.1	<0.2	0.112	0.2	0.237	36.1	0.35
3100	<0.1	<0.1	<0.2	0.121	0.2	0.2	0.1	<0.3

APPENDIX 21 :MEASUREMENT OF FIELD

PARAMETERS AND MISCELLANEOUS

EQUIPMENT

pH

The pH was measured using a Hanna HI 9025 pH meter with temperature compensation and an Orion probe. A 2 buffer (pH 4.01 and pH 7.01) calibration was performed at each new field site and the electrode was kept at the maximum level of electrolyte at all times

Alkalinity

The alkalinity was measured using a Hach digital titration kit with readings given as mg/l of CaCO_3 . A 100 ml volume of filtered sample was titrated against xxM sulphuric acid using a Bromcresol green-methyl red indicator in sachet form. The end point was reached at pH 4.5 when the indicator became colourless and then pale pink with an additional drop.

Conductivity

The conductivity was measured in microsiemens using a Hanna HI 9635 conductivity meter and probe with built in temperature compensation. During the summer 2000 field season a PHOX 52 probe was also used for a limited period. A calibration between the two probes was undertaken and a correction factor applied.

Temperature

The conductivity and pH meters both had a built in temperature correction facility and the temperature displayed on the Hanna conductivity probe was recorded as the sample temperature. The results from the conductivity meter were compared against a standard mercury thermometer and found to be in agreement. The temperature recorded when sampling the riverbed piezometers was thought to be in general higher than the temperature of the groundwater owing to the effect of direct solar radiation on the sample tube and frictional heating resulting from the peristaltic pump.

Dissolved Oxygen

The dissolved oxygen (D.O.) was measured for filtered samples using a Hanna probe during the Summer 2000 field season and a Chemets ampoule titration system during the Summer 2001 season. The Hanna probe required constant agitation as it consumed oxygen within the sample and needed a significant period before stable temperature conditions were reached making it less than ideal. A calibration was performed against atmospheric oxygen content at each new site.

The Chemets titration system required comparison against a selection of standard colours from which D.O. could be estimated to the nearest 1 mg/l in the range 0 to 11 mg/l. A comparison of the two methods indicated an acceptable correlation. Both methods require rapid access to the sample prior to significant oxygen entering the sample from the atmosphere.

REDOX

The redox potential of the sample was measured using a Hanna ORP Redox pen during the summer 2000 field season and a Hanna HI 9025 meter and Cole Palmer Redox probe during the Summer 2001 season. The measurement of the Redox was problematic and required a long period (>10 minutes) for stabilisation in the reading. In many cases the sample had not reached equilibrium under the new conditions after 20 minutes. The initial value of redox potential was therefore thought to be more representative of the groundwater conditions and was recorded as the principal redox value.

Miscellaneous Field Equipment

Portable Peristaltic pump

To facilitate sampling of the riverbed piezometers, a portable peristaltic pump was constructed powered by a 12 volt car battery. A peristaltic pump head (Masterflex, size 15) was mounted on a steel box using a 3 mm steel backing plate into which the appropriate diameter holes had been drilled and threaded. A 12 VDC electric motor (PM 10 CMB 60W, 7.3A) with sufficient torque to drive the pump was mounted within the steel box. A slot was cut in the end of the motor drive shaft to accommodate the end of the pump shaft and a brass tube coupling was machined to fit over the joint between the two. Power was supplied via battery clamps through a section of cable containing an eight amp fuse and a switch. The pump and battery were carried in plastic containers attached to a frame rucksack.